

## CHAPTER 3: ALTERNATIVES

This chapter describes five alternatives and outlines how each alternative addresses issues identified by the public. FWP's preferred alternative is also described. A summary is included at the end of the chapter (Table 30).

### Introduction

FWP initiated this EIS to involve all Montanans and other interested parties in the wolf planning process and to ensure full compliance with MEPA. Because of the significant number of comments taken during the scoping period, FWP consulted with the Wolf Management Advisory Council prior to finalizing the alternatives presented in this EIS. In January 2003, FWP and the council discussed and examined new information and a summary of public comments. The council discussed several new issues that arose during the scoping process, revisited some issues it had previously discussed, and formally endorsed several updates to their original planning document. The updates are incorporated into this document.

Ultimately, FWP crafted a total of five alternatives. One alternative suggests that FWP would not develop and adopt a state wolf management program. Three alternatives, presenting a spectrum of approaches, suggest that FWP should adopt a management program. One of these three is the work of the council. The fifth alternative presents a "contingency," or interim plan that FWP would consider implementing if delisting were delayed. Table 21 summarizes the main scoping issues and indicates which issues were significant enough to drive creation of the alternatives and which issues were treated differently in each alternative.

Table 21. Issues identified by the public (in the order of their frequency), whether or not the issue drove creation of a separate alternative, and whether the issue is treated differently in each alternative.

<b>Scoping Issues, identified in 2002</b>	<b>Drives Creation of Alternatives?</b>	<b>Treated Differently in the Alternatives?</b>
Wolf Management, Numbers, and Distribution	Yes	Yes
Social Factors	Yes	Yes
Administration and Delisting	Yes	Yes
Prey Populations	Yes	Yes
Funding	Yes	Yes
Livestock	Yes, with Compensation	Yes
Wolf Habitat, Connectivity, Land Management	No	Yes
Compensation	Yes, with Livestock	Yes
Economics / Livelihoods	No; overlaps other issues	Yes
Information/Education, Public Outreach	No	Yes
Human Safety	No	No
Monitoring	No	Yes
Other Wildlife	No	No
Private Property	No	Yes
Hybrids	No	No
Wildlife Management Areas	No	Yes
Questions	No	Yes

## Alternatives Selected for Analysis

In general terms, most public scoping comments fell along a continuum from highly protectionist philosophies to highly exploitive philosophies. More specifically, input ranged from the need to prevent all wolf mortalities (no matter what the circumstances) to the need to kill or remove all wolves from Montana. This philosophical spectrum represents peoples' values, opinions, and beliefs. These represent the social factors that need to be considered. Four alternatives were crafted to represent that philosophical continuum within the sideboards of the federal requirement for a secure population. The fifth alternative falls within the continuum, but describes a potential interim state program under a different legal context than the other alternatives—namely state management while the gray wolf is in the process of being delisted.

The issues establish a framework for the development of the alternatives. The alternatives could be thought of as the different ways of accomplishing the proposed action. They encompass a range of possibilities and establish clear differences among the alternatives. FWP selected one of the alternatives as its preferred approach, but FWP is not legally required to select that alternative in its final decision. In fact, the decision maker could select any alternative or even combine elements of several alternatives into a new alternative, based on the public comment FWP received on this draft and the results of the environmental review.

During the public comment opportunity in 2003, the public was invited to review the Draft EIS and the alternatives. FWP asked for input on specific elements of the alternatives and for ways in which they could be modified. The Final EIS describes the public comment process for the Draft EIS and provides a sample of representative comments received on the Draft EIS (see Appendix 5). The Final EIS also provides clarification and additional information on FWP's preferred alternative. The ROD will describe FWP's final decision.

The main issues selected for further analysis and which underlie the specific details of the alternatives are: wolf conservation and management, social factors, administration, prey populations, livestock, and compensation. These issues will remain the primary focus for the analysis of environmental consequences (Chapter 4). Because a continuum was also evident for the other issues listed in Table 21, many are also treated differently in each of the alternatives. The five alternatives listed below are described in greater detail in this chapter and summarized in a table at the end of the chapter (Table 30).

1. No Action. FWP does not develop and adopt a wolf conservation and management program.
2. Updated Council. FWP would adopt the Montana's Wolf Management Advisory Council's Planning Document as written and updated by the council in January 2003. Montana's wolf conservation and management program would consist of the original planning document and the updates outlined in this EIS. This is FWP's preferred alternative.
3. Additional Wolf. FWP would adopt the council's updated Planning Document as the conservation and management program, but the number of breeding pairs would be increased. This alternative was developed in response to public comments expressing general support for FWP to manage the gray wolf, but to do so conservatively and with greater numbers of wolves on the landscape.
4. Minimum Wolf. FWP would develop and adopt a wolf conservation and management program that meets the minimum standards and requirements for a secure, viable wolf population, but requires aggressive management to maintain wolf population numbers at the lowest level.

acceptable to USFWS and restricts wolf distribution to primarily public lands in western Montana.

5. Contingency. FWP would seek to implement most provisions of Alternative 2 through an agreement with USFWS while the gray wolf was still listed under ESA, in the event that actual delisting is postponed because of delays in state planning efforts or because prolonged litigation blocked transfer of full authority to Montana. This alternative represents an interim step. FWP would be working to accomplish delisting with USFWS, but FWP would begin managing the Montana gray wolf population while the delisting process is completed. Once delisted, FWP would implement the remaining elements of Alternative 2 (Updated Council) that had previously been prohibited by federal regulations.

### **Alternatives Identified during Scoping, but not Considered Further**

1. *No gray wolf recovery program in the northern Rockies or individual wolves present in Montana.*

This alternative was not considered because it is outside the sideboards established by the Northern Rocky Mountain Wolf Recovery Plan, which calls for a viable, secure wolf population in the states of Montana, Idaho, and Wyoming. The question of whether or not wolves will be present in Montana has been addressed through various legal challenges to the federal recovery program. All litigation has been resolved and wolves will remain. Although there have been previous reports of gray wolves in Montana, wolves began dispersing into northwestern Montana from Canada in the early 1980s and were reintroduced to YNP and central Idaho in the mid 1990s. Removing all wolves from Montana is neither feasible nor legal. Relevant alternatives for this EIS must address the question of *how* gray wolves in Montana will be managed in the future.

2. *Delist the gray wolf from ESA, but USFWS retains management responsibility.*

The U.S. Congress charges USFWS with the recovery of listed species, and ESA directs USFWS to delist species once recovery criteria are met. There is no legal mechanism or precedent for USFWS to manage a delisted species. Indeed, the opposite is true. The respective state fish and wildlife agencies are the traditional and appropriate entity to manage non-imperiled species--as resident, native wildlife according to state laws and regulations. For USFWS to continue managing the gray wolf in Montana, the species would need to remain listed under ESA, even after recovery criteria are met. This would conflict with USFWS's authority and the legal requirements of ESA to delist species once recovery goals are met.

3. *Changes in how USFWS implements the recovery program in Montana. A related alternative could involve changes to ESA.*

The states, through their respective fish and wildlife agencies, are encouraged to conserve and manage species so that federal ESA protections are not warranted. However, once a species is listed under ESA, the U.S. Congress invests almost sole authority to oversee recovery efforts with USFWS and their cooperating partners due to the national value associated with recovering rare and imperiled species. In 1995, FWP decided that it would not formally participate as a cooperator in shaping and implementing the recovery program. However, FWP has participated informally through consultation and information exchange since then. FWP continues to informally consult with USFWS, but does not have any decision-making authority in the federal program currently. Modification of ESA is a separate issue and well beyond the scope of the proposed action.

## Description of the Alternatives Considered

### Alternative 1. No Action

Under this alternative, Montana does not prepare or adopt a state conservation and management plan. Because the state would not develop a plan, USFWS would not propose to delist the gray wolf. Therefore, wolves in Montana would continue to be managed by USFWS. This alternative represents the existing situation.

#### Implementation of this Alternative

Implementation of this alternative would involve FWP completing this EIS process and signing a Record of Decision indicating that it will not take any further action.

#### How Does this Alternative Address the Major Issues?

***Wolf Management, Numbers and Distribution.*** USFWS and its cooperating partners carry out all management, monitoring, public outreach, and technical assistance to landowners. Wolves occurring within the Northwestern Montana Recovery Area are currently managed as “threatened” according to recently adopted new federal rules (USFWS 2003a). Wolves occurring elsewhere in Montana are managed as “experimental, non-essential” according to the final rules adopted for the reintroduction effort (USFWS 1994a).

USFWS decision-making is guided by ESA, the Northern Rockies Wolf Recovery Plan (USFWS 1987) and its amendments, the Northwestern Montana and Central Idaho Interim Wolf Control Plan (USFWS 1999), new rules pertaining to managing “threatened” wolves in northwest Montana (USFWS 2003a) the Final EIS on Reintroductions of Gray Wolves to YNP and Central Idaho, and the experimental rules (USFWS 1994a). The USFWS could adopt or amend management policies or regulations at any time in the future, so long as the changes were consistent with ESA requirements to recover the species and the proper administrative and procedural steps are followed. In 2000, USFWS proposed to reclassify wolves in northwestern Montana from “endangered” to “threatened” and to implement new rules that increase management flexibility for the agencies and landowners (USFWS 2000). USFWS formally adopted those new rules in the spring of 2003 after FWP released its Draft EIS. See USFWS (2003) for a detailed description of those rules. Some details, as they relate to the issues, are discussed below.

Wolf management on behalf of other interests is somewhat limited under the existing federal recovery program. The primary focus of the federal program is on recovery of the species—increase wolf numbers and distribution so that protection under ESA is not longer warranted. USFWS may or may not be able to address certain issues, depending on the legality or consistency with existing federal regulations. The federal program emphasizes conflict resolution for livestock and human safety concerns rather than proactive management of wolf abundance or distribution per se. USFWS has somewhat limited management flexibility under ESA.

***Social Factors.*** This alternative represents the most conservative because federal law and regulations, most notably ESA, guide the program not state laws. This alternative was created to most closely reflect public comments that expressed protectionist philosophies, a distrust of state wildlife agencies, and that supported permanent protection of the gray wolf under ESA. Ironically, this alternative also reflects some public comments that did not support the State of Montana developing a program because wolf management would then stay with USFWS, the agency “responsible for creating a problem for Montana residents.”

**Administration, Delisting.** USFWS would not propose to delist the gray wolf in the northern Rockies in the absence of conservation and management plans from Montana, Idaho and Wyoming. Therefore, the species remains listed and managed by USFWS and the cooperating partners in all aspects. The State of Montana would not be involved in day to day management activities.

Under the Montana Endangered Species Protection Act, the gray wolf would still remain listed as “threatened” or “non-essential, experimental” throughout Montana because SB163 would not take effect. FWP will still have some obligations under the state law to assist the federal recovery effort under Montana’s ESA Section 6 agreement to conserve threatened and endangered species. The State of Montana will still informally consult with USFWS, but the state would not participate in decision-making.

**Prey Populations.** USFWS would not carry out any particular management on behalf of prey populations, but the agency acknowledges that wolf predation can influence prey population abundance or distribution, particularly in conjunction with other environmental factors or concurrent with human hunting. FWP would continue managing ungulates subject to existing plans and policies.

In 2000, USFWS proposed new regulations to allow a state or tribe to capture and translocate wolves to other areas because of adverse impacts to wild ungulate populations after preparation of an approved state wolf management plan. Those new rules were finalized and adopted in 2003. State plans must define impacts, describe how they will be measured, and identify possible mitigation measures. Before any management activities occur, USFWS has to approve the plan and conclude that such translocations would not slow wolf population growth. Presently, a Montana wolf management plan has not been adopted or submitted to USFWS for approval. Under this alternative, none would be prepared in the foreseeable future, so capture and translocation of wolves to other areas because of impacts to ungulate populations could not occur.

**Funding.** USFWS wolf recovery program in the northern Rockies is funded through the U.S. Congressional budgeting and appropriations process. FWP occasionally consults informally with USFWS as needed. The current FWP budget will cover the administrative costs of ongoing informal coordination (up to \$5,000).

**Livestock / Compensation.** USFWS and WS respond to and resolve wolf-livestock complaints according to existing federal regulations. Recent rule changes provide more flexibility for federal officials and private landowners to resolve conflicts in northwestern Montana (USFWS 2003a). Federal officials attempt to resolve conflicts as quickly and efficiently as possible by focusing on the offending individual/s. Management tools include technical assistance to reduce the conflict potential, telemetry-based monitoring, non-lethal hazing devices (or munitions by permit), relocation, and lethal control.

For as long as the gray wolf is listed, citizens’ actions are also constrained by federal regulations, so they need to be cautious because slightly different rules apply in the three federal recovery areas overlapping Montana’s state borders (Figure 1). In the Northwestern Montana Recovery Area, wolves are now classified as “threatened” under ESA. Private citizens are able to injure or kill wolves caught “in the act” of biting, wounding or killing livestock, herding, or guard animals, or domestic dogs on private lands. Citizens could also obtain a permit to shoot a problem wolf on private land if the private property owner, or adjacent private landowner, has had at least two separate confirmed depredations by wolves on livestock or dogs, and USFWS determined that wolves are routinely present and present a significant risk to livestock. On public lands, private citizens could get a permit to kill a wolf “in the act” of attacking livestock or herding or guard animals on federal lands after USFWS or WS confirmed that wolves have previously wounded or killed livestock and agency efforts to resolve the problem have been terminated. This permit would not be issued in response to attacks on domestic dogs unless they are livestock herding

or guarding dogs. In addition, citizens could scare a wolf by yelling, shooting a gun in the air or driving a vehicle near a wolf (noninjurious opportunistic harassment), but the wolf can not be injured or killed in the process and the citizen must not take pre-meditated actions. A citizen could also obtain a permit for shooting rubber bullets or bean bags at wolves after persistent wolf activity is confirmed (non-lethal intentional harassment), but the permit does not allow the wolf to be mortally wounded and/or killed. All incidents must still be reported to USFWS. Citizens in the Northwest Montana Recovery Area may also call USFWS or WS for assistance at any time.

Elsewhere in Montana outside the Northwest Montana Recovery Area, landowners are able to harass wolves in an opportunistic, non-injurious manner on leases or private property, but producers must report it to USFWS within seven days. Also, a landowner could lawfully injure or kill a wolf caught injuring or killing livestock on private property, but the incident must be reported within 24 hours. In some circumstances, USFWS issues special permits to individual landowners or their agents to kill a wolf, in lieu of a USFWS or WS control action when agency control actions have been ineffective. These permits have strict provisions and conditions under which they could be issued to and exercised by a landowner.

Defenders of Wildlife recognized that a compensation program could help shift the economic liability of wolf restoration away from livestock producers who may be directly affected by wolf-caused losses. Established in 1987, the fund is administered and financed independently from USFWS or WS activities. Upon receiving the report of a WS field investigation, a Defenders of Wildlife representative negotiates directly with the livestock owner to determine compensation. Through the Bailey Wildlife Foundation Proactive Carnivore Conservation Fund, Defenders of Wildlife also cost-shares proactive, preventative management activities, such as installing electric fencing, building a night pen, or increasing the number of guarding animals. The compensation program is intended to assist in the recovery efforts of listed species. Defenders of Wildlife will presumably continue providing compensation payments and cost-sharing preventative management tools so long as the gray wolf remains listed. However, these efforts are voluntary and sustained by private donations. Recently, Defenders of Wildlife has been exploring new ideas and approaches to its compensation program that would incorporate concepts from the insurance industry, the idea that a local community can benefit from the presence of wolves, and the need to address economic losses due to depredation.

***Wolf Habitat, Connectivity, and Land Management.*** The gray wolf is a habitat generalist and can survive where there is adequate prey and legal protection from indiscriminant killing by humans. The federal program emphasizes public lands where the potential for conflict is lower, but USFWS acknowledges that wolves can and do use private lands. Connectivity of wolf packs is assured by the legal protections of ESA, a relatively high reproductive rate, and dispersal between and among the three recovery areas. Designating critical habitat or specific corridors was not necessary for wolf recovery in the northern Rockies. Outside national parks, there are few travel restrictions or area closures on public lands specifically for wolves. YNP and GNP both enacted temporary area closures around den sites vulnerable to excessive disturbance by humans.

***Economics / Livelihoods.*** USFWS recovery program has avoided disrupting land management activities such as logging that may be harmful to local economies and people's livelihoods. USFWS has also tried to address wolf-livestock conflicts rapidly and efficiently in recognition of the disproportionate effect wolves may have on some operators. Changes in big game hunting activity and resultant economic effects on outfitters are primarily a state issue because FWP manages ungulate populations and a state board oversees the outfitting industry. USFWS recognizes that wolf recovery in the northern Rockies benefits other economic sectors and commercial activity because of the increased tourism and visitation associated with wolf viewing.

**Information / Public Outreach.** USFWS and their cooperating partners prepare an annual report for the Northern Rockies Recovery Program. Weekly updates are widely distributed electronically and posted on the USFWS web site throughout the year. Technical assistance is provided to landowners and others. Presentations are made to civic groups and in educational settings. In addition, private entities and non-profit organizations help fulfill public educational needs.

**Human Safety.** A person can legally injure or kill a wolf in response to an immediate threat to human life anywhere in Montana. The action must be reported to USFWS within 24 hours. Newly adopted rules in the Northwest Montana Recovery Area allow a person to opportunistically harass a wolf without injuring it when trying to scare it away from people, domestic dogs or livestock (non-injurious opportunistic harassment). With a permit, a person can use rubber bullets or bean bags to harass wolves near people, dogs, or livestock on public or private land. A citizen may kill a wolf “in the act” of attacking domestic dogs on private lands only. A person cannot kill a wolf “in the act” of attacking non livestock herding or livestock guarding dogs on public lands, but a citizen could scare or harass the wolf non-injurious. There are no changes to the existing rules guiding citizen actions in the experimental, non-essential area. The reader is referred to USFWS (2003) for specific language on the newly adopted federal rules for the Northwest Montana Recovery Area and a review of the rules in the experimental, non-essential area.

**Monitoring.** The goal of the federal monitoring program is to measure progress towards recovery, such as documenting breeding pairs and counting pups, confirming pack persistence or new pack formation, delineating pack territories, etc. Radio telemetry is an important, but expensive monitoring tool. Other information is gathered from public reports of tracks, sightings, or sign. WS field activities also yield important information and contribute to the monitoring program. How intensively USFWS would continue to monitor a recovered, but still listed wolf population in the Northern Rockies is unclear. Any effort beyond documenting that the minimum recovery goal is met could be subject to USFWS budget priorities.

**Other Wildlife.** Wolves are an important link in the food chain and probably are important for ecosystem functioning. No special management provisions exist for other wildlife species per se. Prior to implementing any recovery program, USFWS completes an internal review to assess the impacts of recovery on any other ESA-listed species. FWP could address any special needs of non-listed species if it becomes necessary.

**Private Property.** Although the federal program concentrated recovery efforts on public lands, the gray wolf is a wide-ranging carnivore capable of long distance movements. USFWS acknowledges that wolves will use private property. In addition, USFWS acknowledges that wolves can injure or kill livestock, a type of private property damage. Aspects of the program address that damage (see *Livestock / Compensation* issue above). Private property uses are not restricted.

**Hybrids.** Gray wolf-dog hybrids or captive wolves do not contribute to the federal recovery program in the northern Rockies and are not protected by ESA. In response to reports of large canids near people, USFWS establishes whether or not the animal is a wild wolf. If it is not a wild wolf, USFWS defers to local or state authorities to resolve the problem. State law assigns regulatory oversight of hybrid or captive wolf ownership to FWP. Federal and state laws prohibit removing wolf pups from the wild.

**Wildlife Management Areas.** There are no special provisions in the federal program governing wolf occupancy or use of FWP WMAs. WS would investigate wolf-livestock conflicts on WMAs similar to investigations elsewhere.

### **Alternative 2. Updated Council – *FWP's Preferred Alternative***

Under this alternative, FWP adopts and implements the Montana Wolf Management Advisory Council's Wolf Conservation and Management Planning Document and the updates to the document described in this EIS. This document suggests that FWP recognize and accept the challenges, responsibilities, and benefits of a restored wolf population. It also acknowledges that wolf management will not be easy, but that wolf restoration is fundamentally consistent with Montana's history of wildlife restoration and conservation. The planning document also describes a spectrum of management activities that maintain viable populations of wolves and their prey, resolve wolf-livestock conflicts, and assure human safety. The management philosophies and tools are intended to assure the long-term persistence of wolves in Montana by carefully balancing the complex biological, social, economic, and political aspects of wolf management. The Planning Document is presented in its entirety as Appendix 1. How the planning document and subsequent council updates address each of the scoping issues are summarized below.

Upon federal delisting, provisions of SB163 take effect and wolves would automatically be reclassified under state law from "endangered" to a "species in need of management." This statutory classification confers full legal protection under state law.

#### **Implementation of this Alternative**

Implementation of this alternative is contingent on securing adequate funding for each of the program elements. Implementation also requires FWP to develop and adopt final administrative rules and regulations under the "species in need of management" designation. This alternative represents FWP's proposed management direction, rules, and regulations. The FWP Commission may then approve and adopt the administrative rules and regulations, including any special language pertaining to wolf management or how FWP would interpret relevant state laws. This alternative would form the basis of those administrative rules and regulations. Future FWP Commission action could reclassify the gray wolf as a big game animal or a furbearer when it becomes appropriate to do so. The FWP Commission would concurrently establish regulations pertaining to management and regulated harvest under the new species designation. The Montana Legislature would establish a wolf license for regulated public harvest, the license fee, penalties for illegal take, and the restitution value. MOUs must also be finalized with MDOL and WS. FWP may seek to develop MOU's or cooperative agreements with Indian tribes to coordinate management and clarify roles and responsibilities.

#### **How Does this Alternative Address the Major Issues?**

***Wolf Management, Numbers and Distribution.*** FWP recognizes the gray wolf as a native species and will integrate wolves as a valuable part of Montana's wildlife heritage. Wolves will be integrated and sustained in suitable habitats within complex management settings. The wolf program will be based on principles of adaptive management (Table 22). Management strategies and conflict resolution tools will be more conservative as the number of breeding pairs decreases, approaching the legal minimum. In contrast, management strategies become more liberal as the number of breeding pairs increases. Ultimately, the status of the wolf population itself identifies the appropriate management strategies. A minimum of 15 breeding pairs, according to the federal recovery definition (an adult male and an adult female with at least two pups on December 31) will be used as a signal to transition to more liberal or conservative management tools, whichever the case may be. This adaptive management trigger is not intended to be a minimum or maximum number of wolves "allowed" in Montana. FWP does not administratively declare an upper limit or maximum number of individuals of any wildlife species in the state in the sense of a "cap." Instead, FWP identifies population objectives that are based on landowner tolerance, habitat conditions, social factors, and biological considerations. Wildlife populations are then managed according to the objectives and current population status, using an array management tools. An



adaptive approach will help FWP implement its wolf program over the range of social acceptance values. Sensitivity towards the challenges of wolf presence and prompt resolution of conflict where and when it develops is an important condition of not administratively capping wolf numbers or defining distribution.

Table 22. The spectrum of management activities to manage and conserve wolves in Montana. The adaptive management model calls for selection of different management strategies as the number of breeding pairs (according to the federal recovery definition) changes from 10-15 to greater than 15. The model also calls for different strategies, depending on landownership patterns (Public Lands and Mixed Land Ownerships), social factors, land use patterns, biological constraints, and the physical attributes of the environment. Some management strategies may apply across all numbers of breeding pairs or management settings, as indicated by the arrows.

	<div> <div>10-15 Breeding Pairs*</div> <div>←   →</div> <div>Greater than 15 Breeding Pairs *</div> </div>			
	Public Lands <i>(backcountry areas &amp; near National Parks)</i>	Mixed Land Ownerships <i>(interspersed public and private lands; interspersed agriculture)</i>	Public Lands <i>(backcountry areas &amp; near National Parks)</i>	Mixed Land Ownerships <i>(interspersed public and private lands; interspersed agriculture)</i>
<b>Montana</b>  <b>Fish,</b>  <b>Wildlife &amp;</b>  <b>Parks</b>	Adaptive management	→	→	→
	Integrate with ungulate management	→	→	→
	Health and disease surveillance	→	→	→
	Population monitoring	Enhanced population monitoring	Limited monitoring to determine pack status	Enhanced monitoring in selected areas
	Research to improve ecological understanding of wolf-ungulate interactions	→	→	→
	Research to evaluate specific management actions	→	→	→
	Law enforcement, high priority	→	Law enforcement standard activity	→
	Public outreach to inform and address specific needs	→	→	→

Table 22. Continued.

	<div> <div>10-15 Breeding Pairs*</div> <div>←   →</div> <div>Greater than 15 Breeding Pairs *</div> </div>			
	Public Lands <i>(backcountry areas &amp; near National Parks)</i>	Mixed Land Ownerships <i>(interspersed public and private lands; interspersed agriculture)</i>	Public Lands <i>(backcountry areas &amp; near National Parks)</i>	Mixed Land Ownerships <i>(interspersed public and private lands; interspersed agriculture)</i>
<b>Montana</b>  <b>Fish</b>  <b>Wildlife &amp; Parks</b>  (continued)	Interagency, tri-state, tribal coordination	→	→	→
	Summarize annual mortality; track breeding pairs numbers using USFWS definition	→	Summarize annual mortality; track pack numbers using combination USFWS definition and other techniques	→
	Ensure human safety; discourage wolf habituation	→	Discourage wolf habituation; more proactive removal of potential problem wolves	→
	No regulated hunting and trapping	No regulated hunting and trapping; licensed sportsperson may be used to resolve conflict with livestock in lieu of government response	Regulated hunting and trapping with FWP Commission oversight; conservative harvest on quota or permit system with mandatory reporting	Regulated hunting and trapping with FWP Commission oversight; harvest on quota or permit system with mandatory reporting; harvest quota more liberal as number of breeding pairs increase
<b>Wildlife Services</b>	Incremental approach, conservative	→	Incremental approach; lethal removal of problem wolves more liberal	Incremental approach; lethal may be 1st, especially on private land
<b>Private Citizens</b>	Non –lethal harassment	→	→	→
	Lethal take in defense of life/property	→	→	→

\* Montana shares a legal requirement with the states of Idaho and Wyoming to maintain a minimum total of 30 breeding pairs in the region. For the purposes of adaptive management, Montana will apply the federal breeding pair definition (a male and a female and at least two pups on December 31) since not all packs successfully breed and have pups every year. Montana would need to maintain 14-18 social groups (defined as four or more wolves traveling in winter) statewide to reliably attain a minimum number of 10 breeding pairs with at least two pups on December 31.

By applying the federal recovery definition of breeding pair, FWP would incorporate an added measure of security and margin for error in the face of unforeseen future events, as well as greater flexibility for management decisions on a day-to-day basis. Successful reproduction would be documented as well. Because not every social group would meet the federal recovery definition as a breeding pair, more groups of wolves would also exist on the landscape in assurance that Montana's minimum contribution towards the tri-state total is achieved. As the Montana wolf population becomes more established, through the monitoring program, FWP will evaluate the more general definition of social group (four or more wolves traveling in winter) as a potential proxy for a breeding pair. (See Monitoring section below).

Wolf distribution in Montana, just as for all wildlife, will ultimately be defined by the interaction of the species' ecological requirements and human tolerance, not through artificial delineations. Social acceptance of wolves is highly variable across the landscape and among different landowners. As a wide ranging carnivore, gray wolves are capable of traveling long distances in relatively short periods of time and could cross many different property boundaries and land uses in a single day. Wolves will be encouraged on large contiguous blocks of public land, managed primarily as backcountry areas or national parks where there is the least potential for conflict, particularly with livestock. Wolf packs in areas of interspersed public and private lands will be managed like other free-ranging wildlife in Montana and within the constraints of the biological and social characteristics, the physical attributes of the environment, land ownership, and land uses. Some agency discretion and flexibility will be exercised to accommodate the unique attributes of each pack, its history, the site-specific characteristics of its home range, landowner preferences, or other factors that cannot be reasonably predicted at this time.

FWP is aware of the concerns expressed about wolves becoming established in eastern Montana or on the Charles M. Russell National Wildlife Refuge. FWP is also aware of the concerns about the potential for wolf-livestock conflicts and wolf-prey interactions that may affect human hunters and the local economy. By not administratively restricting distribution, this alternative would allow wolves to become established by recolonizing the refuge or other areas of eastern Montana that met the ecological needs of wolves and that public acceptance would allow. By not promoting or prohibiting wolves in eastern Montana, FWP is taking a middle-of-the-road approach in allowing wolves to find their place on the landscape without any a-priori assumptions about habitat suitability or public acceptance. Yet, FWP will address conflicts responsively. Landownership patterns and how those lands are managed are also subject to change through time in eastern Montana, just as in western Montana, albeit at a slower rate. An important underpinning of this approach is that any conflicts are addressed and resolved. If wolves do cause conflict, liberal tools would be available to the local managers at the outset so long as there are at least 15 breeding pairs in Montana.

FWP does not plan to actively reintroduce wolves to the refuge or the Missouri River National Monument. At this time, FWP does not believe that USFWS intends to reintroduce wolves on either the refuge or monument. Nonetheless, FWP and citizens need to bear in mind that federal agencies managing national parks, national monuments, and national wildlife refuges all have their own missions, enabling legislation, and wildlife conservation and management goals and objectives to fulfill. FWP remains committed to addressing and resolving conflicts, no matter where wolves are located in Montana.

FWP also points out that under this or any of the alternatives, eastern Montana tribal authorities may also choose to allow wolves to recolonize Indian reservations, or they may even to pursue an active reintroduction program. Because wildlife populations on Indian reservations are managed by the respective tribal authorities, the State of Montana would not have jurisdiction, regardless of concerns expressed by other residents of eastern Montana. Under this alternative, FWP would seek to work cooperatively with any tribe, private landowners, and federal managers to resolve any conflicts stemming from wolf colonization or reintroduction in eastern Montana.

Management flexibility will be crucial to address all of the public interests that surround wolves. Wolf population management will include the full range of tools from non-lethal to lethal and will incorporate public outreach, conservation education, law enforcement, and landowner relations. An effective management program should match the management strategies to the environments or setting in which each wolf pack occurs, recognizing that wolves interact with and respond to the environment in which they live, too. Potential management actions will be evaluated in light of prevailing conditions or extenuating circumstances. Wolf populations will fluctuate as a result of management actions, natural mortality, legal harvest, illegal killing, wolf productivity, and ungulate population fluctuations. If there are fewer than 15 breeding pairs in Montana, management tools are primarily non-lethal, particularly in backcountry settings and for public lands near national parks. Examples of non-lethal techniques include monitoring wolf locations using radio telemetry, changes in livestock husbandry practices, harassment, relocation, or attempts to modify wolf behavior. A minimum of 15 breeding pairs is required to use more liberal management tools, including lethal methods to resolve wolf-livestock, wolf-human conflicts, or concern over a localized prey population in light of the combined effects of predation and environmental factors.

When the wolf population no longer fits the definition of a species “in need of management” or when wolf numbers have increased and population regulation is needed, the FWP Commission may reclassify the wolf as a big game animal or a furbearer. The Montana Legislature would establish the license, fees, and penalties for illegal activities. The FWP Commission could then establish season structure and regulations to implement a public harvest program for wolves as it does for other hunting, trapping or fishing seasons. Initiating a public harvest program is a separate administrative process from this EIS. The FWP Commission follows a process that requires public notification of the proposal, public meetings, and a comment period of at least 30 days. The FWP Commission would initiate this process at a later date when a harvest program becomes biologically sustainable. The Montana Legislature would establish license fees and penalties.

Regulated public harvest of wolves by hunting and trapping during designated seasons will help FWP manage wolf numbers, fine tune distribution, and would take place within a comprehensive management program. Through public input and FWP Commission oversight, harvest regulations would describe legal means of take, and reporting and tagging requirements. Total harvest would be strictly controlled through a permit or quota system, with season closures as soon as harvest objectives are reached. As wolf numbers increase and distribution expands, harvest opportunity would increase. Specific harvest objectives will depend on other losses to the wolf population, such as control actions for livestock depredation or loss of a pack because of intraspecific strife. On a finer scale, wolves could be managed more conservatively on remote public lands or managed more liberally in areas with high livestock densities, depending on harvest objectives, district boundaries, and pack distribution. Regulated harvest and enforcement on Indian reservations would fall under the jurisdiction of the respective tribal governments and be coordinated with FWP management objectives. Hunting or trapping is not permitted in YNP or GNP. FWP’s harvest management would proceed adaptively, but all hunting and trapping is precluded if there are fewer than 15 breeding pairs in Montana. The FWP Enforcement Division would enforce all laws, rules, and regulations just as it does for other legally classified wildlife species. Regulated wolf harvest would take place within the larger context of multi-species management programs, would be biologically sustainable, and would not compromise the investments made to recover the gray wolf. Within the context of a comprehensive program, regulated harvest should advance overall conservation goals by building social tolerance, interest in, and value for the species among those who would otherwise view wolf recovery as detrimental to their ungulate hunting experiences.

During the first five years after delisting, FWP will document that the Montana wolf population is secure and continues to meet the recovery criteria established by USFWS. FWP will informally consult with USFWS and cooperating partners on a regular basis, including a periodic formal review by USFWS.

USFWS will point out any deficiencies or areas of concern and recommend corrective actions to FWP. FWP would take the necessary corrective measures to avoid a relisting of the gray wolf under ESA. FWP will undertake its own thorough, formal review after the first five years. Cooperating state and federal agencies and tribal authorities may also participate. The wolf management program will be subsequently reviewed at least every five years. A more frequent review is provided for within the adaptive management model. By definition, the model incorporates monitoring and evaluation as an ongoing effort within the management program. Management is thus refined and improved through time as information and experience accumulate.

Managing wildlife populations that range across jurisdictional boundaries is always challenging, but especially when different management goals are identified on either side of the boundary. These differing goals and objectives may, in fact, be contradictory. Furthermore, adjoining management authorities are often bound by different sets of laws and policies. Under this alternative, FWP would coordinate with other agencies and responsible parties to resolve any concerns about how cross boundary packs would be managed or how conflicts would be resolved to make sure that park, provincial, tribal, as well as individual state, and tri-state goals are met. Overall conservation and management of boundary packs would proceed concurrently under each authority's plan or policies. Interagency and tribal coordination already takes place for other wildlife species through annual interagency meetings, working agreements, and informal contacts at the field level.

As part of the tri-state coordination effort, Montana may seek an agreement or MOU with Idaho and Wyoming to clarify which state counts which wolf packs within the context of their state's management program so that all wolf packs count toward the tri-state recovery requirement and individual packs are not missed or counted twice. Furthermore, this alternative clarifies Montana's intent that boundary packs should always count toward the 30-breeding pair tri state total for recovery and delisting purposes and that management authority and responsibility are actually shared between Montana and its neighbor, whether state, federal, provincial, or tribal. For the purposes of the Montana's adaptive management program and contribution to the tri-state total, FWP will tally breeding pairs that den within Montana's state boundaries toward the number of breeding pairs which ultimately determines whether liberal or conservative management tools are to be selected. If the actual den site is unknown, Montana and the adjacent state could seek an agreement on how the pack would be counted, using professional judgment or the assignment given by USFWS at the time of delisting.

Under this alternative, FWP would seek state legislation to make the unlawful taking of a gray wolf a misdemeanor under MCA 87-1-102. This statute makes it a misdemeanor to purposely, knowingly, or negligently violate state laws pertaining to taking, killing, possessing, or transporting certain species of wildlife. Including the gray wolf under this statute would be consistent with the inclusion of other legally classified wildlife species, such as deer, elk, moose, mountain lion, or black bear. Specific penalties (e.g. fines) under MCA 87-1-102 (2) would be determined at that time. FWP would also seek legislation to include the gray wolf under the restitution sections of MCA 87-1-111 that require a person convicted of illegally taking, killing, possessing certain wildlife species to reimburse the state for each animal or fish. Adoption of penalties and fines under Montana law in addition to FWP Commission rules is consistent with the council's recommendation that law enforcement be a high priority, that illegal activity be discouraged, and that penalties be similar to black bears and mountain lions. The Montana Legislature would address these in a future session.

FWP may reexamine the current 72-hour reporting requirement (MCA 87-3-130) when a wolf is killed or injured in defense of life or property. With modern communications, it may be reasonable to reduce that time in order to better facilitate examination and preservation of evidence and expedite resolution. The 72-hour reporting requirement outlined in MCA 87-3-130 applies to any legally protected wildlife species (e.g. deer, black bear, mountain lion) when a wild animal is killed in defense of life or property.

***Social Factors.*** This alternative, initially based on the comments and recommendations of the Montana Wolf Management Advisory Council, and its Interagency Technical Committee, was updated to reflect the significant amount of public comment received during scoping. This alternative builds upon the council's original planning effort and mirrors public comments calling on FWP to seek common ground between wolf advocates and those most directly affected by wolf presence. In addition, this alternative is based on calls for a balanced wolf management program that is consistent with modern scientific wildlife management practices and how FWP manages other large carnivores.

Several diseases and parasites have been reported for gray wolves in the lower 48 states. Some had significant impacts on population recovery, especially for wolves in Minnesota, Michigan, and Wisconsin (USFWS 2000). However, in the northern Rockies, diseases and parasites were less influential and have not significantly impacted wolf populations to date (USFWS 2000). Nonetheless, adult wolves die from a wide variety of canid diseases or parasites. Pups may be especially vulnerable to death from exposure to canine parvovirus or canine distemper (Mech and Goyal 1993, Johnson et al. 1994). Monitoring and surveillance of wolf health will provide baseline information. Even though monitoring and surveillance would not stop a disease or parasite related decline, it could demonstrate a possible reason for the decline.

FWP will monitor wolf health by analyzing biological samples collected from dead and live-captured animals. During live capture operations, overall wolf health will be assessed, including presence of external parasites. Blood will also be collected. Blood tests can indicate exposure to canine parvovirus, distemper, and other potentially detrimental diseases. Necropsies will be performed on wolf carcasses to determine cause of death, condition, age, reproductive status, and food habits. General protocols will be followed to collect reproductive tracts, stomach and colon contents, muscle tissue for genetic purposes, and any potentially diseased or parasitized tissues. Other sampling or testing may be conducted, depending on the request or concerns of the submitting party and the condition of wolf remains.

Carcasses and biological samples will be submitted to the FWP Wildlife Laboratory in Bozeman. If warranted, tissues may be collected and forwarded to other laboratories for any specialized testing or forensic investigations. The Wildlife Laboratory will be the primary repository for stored samples and necropsy data, as is the case for some other species. Through time, baseline data will be compiled, which prove invaluable in the long run. As baseline data accumulate, the value of doing routine necropsies may diminish with time, and the submission of carcasses will be reduced to special forensics or disease-related cases. Increasingly, these functions are shared with the Regional Wildlife staff. Today's computer technologies enable locally collected data to be systematically collected and made available to MFWP personnel statewide. As these applications are further developed and refined, less responsibility will be borne by the Wildlife Lab and more will be borne in the Regions. MFWP will continue informal consultation and cooperation with the Wolf Project in YNP or other wolf researchers and managers.

In the unlikely event of human injury or death during a wolf-human encounter, the wolf or wolves will be lethally controlled and the carcasses forwarded to the MFWP Wildlife Laboratory. Carcasses will be tested for rabies or other pre-disposing health factors. If a wolf bites a person during a capture and handling incident, a blood sample will be drawn so it can be tested for rabies.

***Administration, Delisting.*** Upon approval of plans from Montana, Idaho, and Wyoming, USFWS would propose to delist the gray wolf from ESA. When that administrative process is complete, management authority is transferred to the respective states in which wolves reside. State laws and administrative rules become the regulatory and legal mechanisms guiding management. Upon delisting, the wolf would be reclassified under Montana state law as a "species in need of management" according to legislation passed during the 2001 Montana Legislature (SB163). This category offers full legal protection in that a wolf could not be killed without just cause or outside guidelines and administrative rules. Some public comments suggest that the gray wolf be reclassified as a predator under state law, or in a dual-

classification status depending on where on the landscape it is or whether it is on public or private land. FWP clarifies within its preferred alternative that a dual classification for wolves in Montana would not be legal under state laws set to take effect automatically upon delisting. FWP further clarifies that Montana could not maintain an adequate number of wolf packs if wolves on private property or outside designated wilderness areas or national parks could be killed as if classified as a “predator” and subject to unregulated taking, such as the coyote. Nearly all of the wolf Packs in Montana have been found on private land and/or outside wilderness areas and national parks. However, individual wolves depredating livestock can be killed in defense of private property (see livestock section below).

Upon delisting, FWP and the FWP Commission will establish the regulatory framework to manage gray wolves in Montana as a “species in need of management” consistent with the parameters of this alternative. The FWP Commission could then change the legal classification to furbearer or big game animal at some later time. FWP is responsible for implementing monitoring, research, law enforcement, public outreach, and other functions. The FWP Commission oversees FWP policy. The preferred alternative describes a statewide plan that would be implemented by FWP at the local level through the FWP regional headquarters and overall coordination in Helena. As such, the management plan described by this alternative outlines an overall framework that would take effect through a set of consistent legal guidelines and management strategies statewide. A MOU will be signed by FWP, MDOL, and WS to address wolf-livestock conflicts. The Montana Legislature maintains its budget oversight authority. Ongoing interagency, tribal, and interstate coordination activities are important cornerstones of program administration.

FWP anticipates that the public will readily identify real or perceived problems or shortcomings of the program. The challenge for FWP will be to discern between earnest differences of opinion in preferred management direction and substantive shortcomings of the program. Difficult decisions will have to be made and will sometimes be called into question by various interests. However, the ensuing public dialogue will also help evaluate the program and lead to improvements. The Montana Wolf Management Advisory Council recommended that the State of Montana continue to engage a diverse advisory citizen’s group to collaborate on wolf management.

***Prey Populations.*** FWP would seek to maintain the public’s opportunity to hunt a wide variety of species under a variety of circumstances in a sustainable, responsible manner. Wolf presence within the yearlong range of a specific ungulate herd adds a new factor that FWP biologists must consider among all environmental and human-related factors. FWP would integrate management of predators and prey in an ecological, proactive fashion to prevent wide fluctuations in both predator and prey populations (Table 23). To that end, FWP may increase or decrease hunter opportunity for either predators or prey species, depending on the circumstances. If reliable data indicate that a local prey population is significantly impacted by wolf predation in conjunction with other environmental factors, FWP would consider reducing wolf pack size. Wolf management actions would be paired with other corrective management actions to reduce ungulate mortality or enhance recruitment. Concurrent management efforts for wolves and ungulates would continue until the prey population rebounded, recognizing that by the time prey populations begin to respond they may be influenced by a new set of environmental factors.

FWP regularly surveys ungulate populations across a spectrum of their habitats. Information gathered from live populations is also supplemented by harvest information gathered at hunter check stations or through the telephone harvest survey. FWP will intensify ungulate monitoring efforts and consider habitat enhancement projects where wolf packs are established. Research will also improve ecological understanding of wolf-ungulate interactions and evaluate specific management actions for ungulates and/or wolves.

FWP further clarifies under this alternative that prey species are managed according to the policy and direction established by the programmatic review of the wildlife program (FWP 1999) and by species plans. Even though plans are written for individual species, the underlying foundation of those plans is based on an ecosystem perspective. These plans typically describe a management philosophy that protects the long term sustainability of the resource and aims to keep the population within management objectives based on biological and social considerations. As recommended by the council, the gray wolf will be incorporated into ungulate management and future planning efforts.

**Funding.** FWP acknowledges that existing financial resources are not adequate. FWP will seek additional funding from a diversity of sources, including special state or federal appropriations, private foundations, or other private sources. The states of Montana, Idaho, and Wyoming are still investigating the idea of a grizzly bear/gray wolf trust fund that could be created through a special federal appropriation to fund the conservation and management of these two species of national significance over the long term. FWP will use state license money and matching federal funds to conserve and manage this native species on equal standing with other carnivores like mountain lions or black bears. License revenue will be used to partially fund the program since FWP intends to use regulated harvest as a management tool. The FWP personnel and financial resources necessary to fulfill the responsibilities of wolf conservation and management, law enforcement, human safety, public outreach, resolution of wolf-livestock conflicts, compensation, and program administration is an estimated \$913,000-\$954,000 for the first year of full implementation. That does not include overhead or account for inflation. FWP more closely studied the budget presented in the Draft EIS and updated the budget estimates in the Final EIS. The FWP budget estimate reflects the comprehensive nature of designing and implementing a wolf program. It also reflects an extra \$50,000 to fund increased efforts to reduce the risk of depredation and implement more proactive management strategies, the activities of WS, as well as a compensation program.

Compensation for livestock losses would be funded independently and not require the use of state funds, but the amount is still reflected in the budget to accurately represent the cost in the overall program. FWP and the Governor have been working with Idaho and Wyoming officials in preparing a budget request for the tri-state Congressional Delegation to fund wolf and grizzly bear programs for the next three to five years. FWP is seeking these special annual federal appropriations because the trust fund will likely take some time to put together and funding needs in the interim should be addressed. A detailed budget is presented in Chapter 4 and represents Montana's upcoming Congressional budget request. Adequate funding from supplemental sources is required to implement all elements of this alternative. FWP is committed to making sure that FWP has adequate resources to meet the high expectations of the public for the wolf program without having to divert resources from other popular, but equally important programs.

**Livestock / Compensation.** Livestock producers and other landowners provide many benefits to the long-term conservation of gray wolves, not the least of which is the maintenance of open space and habitats that support a wide variety of wildlife, including deer and elk. At the same time, livestock producers may experience financial losses due to wolves. These losses tend to be sheep and young cattle, although occasionally llamas, guarding dogs or other livestock are lost. Some losses can be documented reliably but others cannot. Other financial hardships may be caused by livestock becoming stressed, injured, or trampling newborn young or by changes in husbandry or management practices to reduce risk of depredation.

FWP and MDOL will work together, along with WS, to address and resolve wolf-livestock conflicts through a MOU. FWP, in cooperation with MDOL, will contract WS to respond to landowner complaints, to conduct field investigations, and to carry out control activities for problem wolves. Several Montana counties do not have a WS agent, but instead utilize the services of a county employee or county



contractor. FWP will work with those individuals in those counties directly. FWP has the ultimate responsibility for determining the disposition of wolves. See Table 24.

Table 23. The spectrum of management activities to maintain viable populations of prey species. The adaptive management model calls for selection of different management strategies as the number of breeding pairs (according to the federal recovery definition) changes from 10-15 to greater than 15. The model also calls for different strategies, depending on landownership patterns (Public Lands and Mixed Land Ownerships), social factors, land use patterns, biological constraints, and the physical attributes of the environment. Some management strategies may apply across all numbers of breeding pairs or management settings, as indicated by the arrows.

	10-15 Breeding Pairs* ←		→ Greater than 15 Breeding Pairs*	
	Public Lands <i>(backcountry areas &amp; near National Parks)</i>	Mixed Land Ownerships <i>(interspersed public and private lands; interspersed agriculture)</i>	Public Lands <i>(backcountry areas &amp; near National Parks)</i>	Mixed Land Ownerships <i>(interspersed public and private lands; interspersed agriculture)</i>
<b>Montana Fish, Wildlife &amp; Parks Management Strategies for Prey Species</b>	Adaptive management	→	→	→
	Enhanced ungulate monitoring where wolves are present	→	Enhanced monitoring in selected areas	→
	Research to improve ecological understanding of wolf-ungulate interactions	→	Research to evaluate specific management actions	→
	Habitat enhancement projects	Habitat projects with cooperating landowners	Habitat enhancement projects	Habitat projects with cooperating landowners
	Adjust hunter opportunity to enhance prey populations	Adjust hunter opportunity to enhance prey subject to landowner tolerance	Adjust hunter opportunity to meet prey population objectives	Adjust hunter opportunity subject to landowner tolerance
	Integrate ungulate and carnivore management	→	→	→
	Outreach to inform and address specific needs; emphasize landowner relations	→	→	→

\*Montana shares a legal requirement with the states of Idaho and Wyoming to maintain a minimum total of 30 breeding pairs in the region. For the purposes of adaptive management, Montana will apply the federal breeding pair definition (a male and a female and at least two pups on December 31) since not all packs successfully breed and have pups every year. Montana would need to maintain 14-18 social groups (defined as four or more wolves traveling in winter) statewide to reliably maintain a minimum number of 10 breeding pairs with at least two pups on December 31.

Addressing wolf-livestock conflicts will entail two separate, but parallel elements. One element will be management activities by WS and FWP to minimize the potential for wolf-livestock conflicts and to resolve the conflicts where and when they occur. Examples are providing technical assistance and taking actions that reduce the probability that the offending wolf or wolves will be involved in another depredation incident. This would be funded, administered, and implemented by the cooperating agencies. The second element addresses the economic losses of individual livestock producers through a compensation program when livestock are injured or killed by wolves. The two elements, management and compensation, are funded, administered, and implemented separately and independently of one another--but parallel one another, united in the goal of maintaining a viable wolf population and addressing economic losses.

Livestock producers would report any suspected wolf depredations (injuries or death) or the disruption of livestock or guarding animals to WS directly. If the investigating WS agent determines that a wolf or wolves were responsible, management response will be guided by the specific recommendations of the investigator, the provisions of this plan and by the multi-agency MOU. FWP would direct WS to take an incremental approach to address wolf depredations, guided by wolf numbers, depredation history, and the location of the incident. When wolf numbers are low and incidents take place on remote public lands, WS would use more conservative management tools. WS could apply progressively more liberal methods as wolf numbers increase and for incidents on private lands. Conflict history of the pack, time of year, attributes of the pack (e.g. size or reproductive status), or the physical setting will all be considered before a management response is selected. Management actions will be directed at individual problem wolves. Non-selective methods, such as poison, would not be used.

FWP may also approve lethal removal of the offending animal by livestock owners or their agents by issuing a special kill permit. A special kill permit is required for lethal action against *any* legally classified wildlife in Montana, outside the defense of life/property provision or FWP Commission approved regulations. FWP will not issue special kill permits to livestock producers to remove wolves on public lands when wolf numbers are low. If Montana had at least 15 breeding pairs, FWP may issue a special kill permit to livestock producers that would be valid for public and private lands. FWP will be more liberal in the number of special kill permits granted as wolf numbers increase and for depredations in mixed land ownership patterns.

In a proactive manner, FWP, WS, or other organizations will also work cooperatively with livestock producers with an increased emphasis on proactive efforts to reduce the risk of wolf-livestock conflicts. Extra effort would be into conflict prevention rather than responding after the fact. Landowners could contact a management specialist (FWP or WS) for help with assessing risk from wolves and identifying ways to minimize those risks – while still acknowledging that the risk of livestock depredation by wolves will never be zero. In addition, FWP could work to develop programs that provide livestock operations with additional benefits if they implement preventive approaches and maintain opportunities for wildlife, including gray wolves, on private lands and associated public grazing allotments. It may also involve state and federal land management agencies.

FWP would work with the livestock industry to identify sources of funding to accomplish preventative initiatives. Some funding could come from monies FWP already provides to WS for animal damage management in cooperation with MDOL. Some of those funds could be used to support the development and implementation of preventative programs and technical field assistance to landowners in identifying risks and preventative measures prior to any depredations. Private conservation groups are also working towards those ends. Defenders of Wildlife, through its Proactive Carnivore Conservation Fund, has already cost-shared preventative efforts like electric fencing or extra guarding dogs, as well as providing volunteer labor in the field. Conflict management would emphasize long-term, non-lethal solutions, but removing problem animals may still be necessary to resolve some conflicts. Considerations leading up to

removal of wolves include persistent wolf activity, evidence of wounded livestock, the likelihood of additional losses if no action is taken, evidence of unusual attractants, and/or intentional feeding of wolves.

Beyond technical assistance from WS, FWP, and other collaborating partners, livestock producers (or their agents) may non-lethally harass wolves when they are close to livestock on public or private lands. Private citizens may also non-lethally harass wolves that come close to homes, domestic pets, or people. Upon delisting, private citizens could kill a wolf if it is an imminent threat to human life or attacking or killing a domestic dog. Livestock producers or their agents could also kill a wolf if it is attacking, killing, or threatening to kill livestock. This is consistent with Montana statutes that permit private citizens to defend life or property from imminent danger caused by wildlife.

The prohibition against indiscriminant killing of a wolf is similar to other legally classified wildlife such as big game (e.g. deer, black bear, mountain lion) or furbearers (e.g. martin, otter, or beaver). Montana law would require individuals to report incidents of wolf take to FWP within 72 hours. FWP would investigate to determine all of the facts or circumstances. Additional management tools (e.g. use of rubber bullets to haze wolves that frequent livestock concentration areas) and innovative approaches will arise on a case-by-case basis since each situation is unique.

This alternative clarifies wording from the original Council Planning Document pertaining to defense of life, property, or domestic dogs that could inadvertently mislead the reader. As a clarification of the language in this statute (MCA 87-3-130), FWP notes that *any* citizen may take a wolf protected by state law if it is attacking, killing, or threatening to kill a person or livestock, not just livestock producers or their agents. Furthermore, the *only* two legally classified wildlife species that can be injured or killed by a person defending a domestic dog without a special kill permit is the mountain lion or the gray wolf. A permit would be required for nuisance black bears or even deer. And, the mountain lion or gray wolf must be “attacking or killing” a domestic dog before a person could legally take the lion or wolf. The phrase “threatening to kill” does not apply in the context of defending domestic dogs which are not used for the purposes of herding or guarding livestock. Human intervention in those situations must be non-injurious. Formal definitions of these terms may be adopted during subsequent administrative rule-making through the FWP Commission.

This alternative also clarifies the definition of “livestock” to mean cattle, sheep, horses, mules, pigs, goats, emu, ostrich, poultry, and herding or guarding animals (llama, donkeys, and certain special-use breeds of dogs commonly used for guarding or herding of livestock) for the purposes of addressing wolf-livestock conflicts. Dogs used for other purposes such as hunting or as pets are not covered under this definition. The defense of hunting dogs or dogs as pets is addressed under *Human Safety*. This alternative clarifies the term “non-lethal harassment” to refer to situations in which a wolf is discovered testing or chasing livestock and the owner attempts to scare or discourage the wolf in a non-injurious manner and without prior attempts to search out, track, attract or wait for the wolf. A special permit would be required to actually injure or kill the wolf or if a person purposefully attracted, tracked, or searched for the wolf.

FWP is aware of the concerns raised by agricultural interests in eastern Montana about wolf recolonization or reintroduction in eastern Montana onto the Charles M. Russell National Wildlife Refuge and/or the Upper Missouri River Breaks National Monument. Because of USFWS’s mission in managing wildlife refuges, it is conceivable that a wolf pack could establish a territory on the refuge. In general, national wildlife refuges are closed to all uses and taking of wildlife unless specifically opened by USFWS. It is possible that federal refuge managers would not allow livestock owners to injure or kill a wolf to protect livestock as provided in Montana’s SB163 (MCA 87-3-130) (Bill Hartwig pers. comm.). However, citizens would be able to protect their livestock according to the provisions of SB163 off the

refuge. In any case, livestock producers should report any conflicts to WS. FWP would work with USFWS, WS, and livestock producers to address wolf depredation complaints both on and off the refuge, should conflicts arise. FWP hopes that all parties would support an active, responsive approach. The compensation program could play a more significant role in working through wolf-livestock conflicts. FWP will make a concerted public outreach effort to work with USFWS, WS, livestock industry groups and individual producers to provide information and additional clarification on how to report conflicts and the steps that can be taken by agencies and individuals both on and off the refuge to resolve the problem.

Table 24. The spectrum of potential management activities to minimize the potential for wolf-livestock conflicts and the tools to resolve conflicts where and when they develop. The adaptive management model calls for selection of different management strategies as the number of breeding pairs (according to the federal recovery definition) changes from 10-15 to greater than 15. The model also calls for different strategies, depending on landownership patterns (Public Lands and Mixed Land Ownerships), social factors, land use patterns, biological constraints, and the physical attributes of the environment. Some management strategies may apply across all numbers of breeding pairs or management settings, as indicated by the arrows.

	10-15 Breeding Pairs* ←		→ Greater than 15 Breeding Pairs*	
	Public Lands <i>(backcountry areas &amp; near National Parks)</i>	Mixed Land Ownerships <i>(interspersed public and private lands; interspersed agriculture)</i>	Public Lands <i>(backcountry areas &amp; near National Parks)</i>	Mixed Land Ownerships <i>(interspersed public and private lands; interspersed agriculture)</i>
<b>Livestock Producers</b>  (cattle, calf, hog, pig, horse, mules, sheep, lamb, goat, guarding animal, emu, ostrich, poultry)	Lethal take in defense of life/property	→	→	→
	Non-lethal harassment	→	→	→
	WS response; technical assistance from WS, FWP, other	→	→	→
	No FWP special kill permit for public lands	FWP kill permit for private lands only; conservative number issued	Limited number of FWP kill permits for public lands	FWP kill permits for private or public lands; number issued more liberal
	No open season for designated trapper	→	Designated trapper or licensed hunter/trapper during open season	Designated trapper or licensed hunter/trapper during open season
<b>Citizens</b> (outfitters, hunters, recreationists)	Lethal take in defense of life/property	→	→	→
	Non-lethal harassment	→	→	→

Table 24. Continued.

	10-15 Breeding Pairs* ←		→ Greater than 15 Breeding Pairs*	
	Public Lands <i>(backcountry areas &amp; near National Parks)</i>	Mixed Land Ownerships <i>(interspersed public and private lands; interspersed agriculture)</i>	Public Lands <i>(backcountry areas &amp; near National Parks)</i>	Mixed Land Ownerships <i>(interspersed public and private lands; interspersed agriculture)</i>
<b>Wildlife Services</b>	Technical assistance to producers, cooperation with FWP	→	→	→
	Activities directed by Memorandum of Understanding with Montana Fish, Wildlife & Parks and Montana Department of Livestock	→	→	→
	Incremental approach, conservative	→	Incremental approach	Incremental approach, liberal
<b>Montana Fish, Wildlife &amp; Parks</b>	Technical assistance to producers, cooperation with Wildlife Services	→	→	→
	No special kill permits issued	Special kill permit administration and oversight; carcass retrieval	→	→
	Responsible for disposition of wolves involved in conflicts	→	→	→
	Public outreach to inform and address specific needs	→	→	→
	No open hunt/trap season	→	Conservative hunt/trap season where depredation is chronic	Hunt/trap season to maintain packs <u>and</u> minimize potential for conflict

\* Montana shares a legal requirement with the states of Idaho and Wyoming to maintain a minimum total of 30 breeding pairs in the region. For the purposes of adaptive management, Montana will apply the federal breeding pair definition (a male and a female and at least two pups on December 31) since not all packs successfully breed and have pups every year. Montana would need to maintain 14-18 social groups (defined as four or more wolves traveling in winter) statewide to reliably maintain a minimum number of 10 breeding pairs with at least two pups on December 31.

This alternative would maintain and enhance the benefits of a compensation program. See Table 25. The State of Montana, with FWP in a leadership role, intends to find or create an entity to administer a compensation program. But compensation payments would not be made from FWP funds, matching federal funds intended for FWP programs, or from state revenue sources (e.g. taxes or the general fund). Defenders of Wildlife could be a partner. As Defenders of Wildlife considers changes to its existing compensation program, FWP would be willing to participate in discussions and to work with Montanans to evaluate whether a modified program would meet their needs.

The entity or non-governmental organization would be independent of FWP to retain impartiality and negotiations would take place between the livestock owner and the independent administrator. Agency decision-making on the disposition of the problem animal is independent of the outcomes of the compensation negotiations. Upon receipt of a WS investigative report confirming wolf-caused losses, Defenders of Wildlife or some other independent entity would negotiate directly with the other to determine compensation. Producers would be compensated for confirmed and probable livestock losses at fair market value at the time of death and at fall value for young of the year. Livestock eligible for compensation include cattle, calves, hogs, pigs, horses, mules, sheep, lambs, goats, and guarding animals. Domestic pets or hunting dogs would not be covered. Despite the present uncertainty of how a compensation program would be designed and administered, securing adequate funding for compensation is of equal priority as securing funding to implement the other state and federal agency management activities.

Compensation programs are appealing and may in fact contribute to long-term conservation goals. A group of private non-profit organizations, livestock organizations, the University of Montana, and multiple state and federal agencies have been working on a comprehensive analysis of compensation programs. Final results are expected in April 2003. These results, along with future input from the public or the Wolf Management Advisory Council, could be used to determine more specific details of a compensation program.

***Wolf Habitat, Connectivity, and Land Management.*** FWP ungulate programs link habitat and population management through sustained public hunting to achieve ungulate population objectives. In this way, FWP takes an important habitat need of wolves into consideration. This, along with the amount of land held in public ownership and adequate legal protections, provides long-term habitat availability for wolves. Federal land management agencies are increasingly managing lands from an ecosystem-level perspective, considering all components and functional relationships. FWP will collaborate with private landowners as well to address concerns about wild ungulates or other habitat-related issues.

Recent scientific peer review of the USFWS definition of a viable wolf population indicated that human tolerance, strict regulation of human-caused mortality, long term management strategies, and maintenance of the genetic connectivity among sub-populations will determine the long term viability of a recovered population (USFWS 2002). Reviewers emphasized the regulation of human-caused mortality and the importance of connectivity to long-term population security. These are the standards by which the three state plans, when taken together, will be evaluated.

In more practical terms, this highlights the importance of assuring that there are frequent natural dispersal events in which individual wolves move between and among sub-populations in Montana, Idaho, and Wyoming. Dispersal, then, constitutes the “connection” that allows genetic mixing of sub-populations and ensures the viability of the entire northern Rockies population. Montana is an important geographic and physical link “connecting” these sub-populations with Canadian populations. Canadian national and provincial parks along the continental divide provide important secure habitats for wolves just north of the international boundary. However, wolf dispersal from the U.S. northward appears to be as important to the viability of Canadian sub-populations in southern British Columbia and Alberta as dispersal from

Table 25. Direction and guidelines for compensation of livestock losses due to wolf depredation in Montana. State of Montana intends to find or create an entity to administer a compensation program. The adaptive management model calls for selection of different management strategies as the number of breeding pairs (according to the federal recovery definition) changes from 10-15 to greater than 15. The model also calls for different strategies, depending on landownership patterns (Public Lands and Mixed Land Ownerships), social factors, land use patterns, biological constraints, and the physical attributes of the environment. Some management strategies may apply across all numbers of breeding pairs or management settings, as indicated by the arrows.

	<div> <div>10-15 Breeding Pairs*</div> <div>←   →</div> <div>Greater than 15 Breeding Pairs*</div> </div>			
	<b>Public Lands</b> <i>(backcountry areas &amp; near National Parks)</i>	<b>Mixed Land Ownerships</b> <i>(interspersed public and private lands; interspersed agriculture)</i>	<b>Public Lands</b> <i>(backcountry areas &amp; near National Parks)</i>	<b>Mixed Land Ownerships</b> <i>(interspersed public and private lands; interspersed agriculture)</i>
<b>Livestock Producers</b>  (cattle, calves, hogs, pigs, horses, mules, sheep, lambs, goats, guarding animals)	Incentives to reduce potential for conflict  Compensation and/or livestock insurance program for confirmed and probable losses at fair market value  No compensation for pets, alternative livestock	→ → →	→ → →	→ → →
<b>Funding</b>	Private donations and/or special state or federal appropriations (no FWP, matching federal or general state funds)	→	→	→
<b>Adminis-tration</b>	State of Montana intends to find or create an entity to administer a compensation program; details pending final results of Compensation Research Study; Non governmental organization administers independently of FWP	→	→	→

\* Montana shares a legal requirement with the states of Idaho and Wyoming to maintain a minimum total of 30 breeding pairs in the region. For the purposes of adaptive management, Montana will apply the federal breeding pair definition (a male and a female and at least two pups on December 31) since not all packs successfully breed and have pups every year. Montana would need to maintain 14-18 social groups (defined as four or more wolves traveling in winter) statewide to reliably maintain a minimum number of 10 breeding pairs with at least two pups on December 31.

there to the U.S. Canadian packs will likely continue to be a source of wolves dispersing into the U.S. while some U.S. wolves will continue dispersing into Canada. This exchange will be important to both U.S. and Canadian wolf populations.

By adopting the more specific federal breeding pair definition during the first few years of state-directed management, Montana will be assuring that adequate numbers of dispersal events occur. As wolf distribution slowly expands to suitable habitats with a minimal number of conflicts over time, the Montana population will still be a reliable source of dispersers within the bigger regional population. Across the wolf recovery area in the northern Rockies, Yellowstone and Glacier national parks function as core habitats at opposite ends of current wolf distribution. Adequate wolf numbers and distribution between those secure areas, legal protection, public outreach and education, and the network of public lands in western Montana, central Idaho, and northwestern Wyoming facilitates connectivity and dispersal between the sub-populations. The monitoring program and ongoing coordination with Idaho and Wyoming officials will ensure regional connectivity and adequate dispersal.

Specific habitat corridors, travel restrictions, or area closures are not incorporated in this alternative. They were not necessary to restore the gray wolf in Montana, and they should not be necessary to conserve and manage a recovered population. Nevertheless, the gray wolf and other wildlife species will benefit from linkage mapping efforts now underway for lynx and grizzly bears. FWP has attended technical meetings for these efforts and is a member of the Interagency Grizzly Bear Committee.

**Economics / Livelihoods.** The council acknowledged that the economic costs and benefits of wolf restoration in Montana accrue to individuals or economic sectors differently. Some individuals or economic sectors may benefit while others may be harmed. Thus, this issue is addressed in the Planning Document by the council's general recommendation to integrate and sustain a wolf population within the complex biological, social, economic, and political landscape. Furthermore, benefits and costs seem to affect individuals more significantly, rather than an industry as a whole. Therefore, this disparity is addressed through the inclusion of certain management tools or strategies such as those described in the *Livestock/Compensation* and *Prey* sections. FWP, WS, and others would work proactively with individual livestock producers and other private landowners to address and minimize risk of economic losses associated with wolf conflicts. The council also acknowledged that some economic sectors benefit from the increased tourism and visitation associated with wolf-viewing and tourists' perception of Montana as a wild and scenic place to visit. The council also affirmed the USFWS assessment that restrictions on federal land management activities (e.g. logging or grazing) were not necessary for long term wolf management. No restrictions are suggested by this alternative.

**Information / Public Outreach.** This alternative acknowledges the importance, value, and need for an ongoing educational public outreach program that parallels wolf management activities. The objective is to provide scientifically based, factual information. A collaborative approach will also be necessary, but FWP will take the lead.

FWP already started its public outreach efforts with the 2002 Montana Hunting Regulations and the 2002-2003 Trapping Regulations. Tips and information were included to help hunters and trappers correctly identify a wolf from a coyote and how to contact FWP or USFWS to report wolf sightings. FWP will take a leadership role in formulating and disseminating educational materials. FWP is aware of existing wolf-related educational materials and non-agency initiatives that could be incorporated in this important program component. These will be evaluated for future incorporation into the outreach effort.

FWP acknowledges receiving comments supporting a stronger public outreach program than what was outlined in the Draft EIS preferred alternative. Many of these comments indicated that the preferred



alternative did not place enough emphasis on this element of the wolf program. In response, FWP adds the following excerpt from the Wolf Advisory Council's Planning Document.

The long-term status of a gray wolf population in Montana will be determined by human attitudes toward wolves. FWP recognizes that the key to successful implementation of a wolf management program lies in effective working relationships with the public and landowners. A wolf management plan for any state will be controversial. Personal opinions, anecdotal experiences, and personal biases sometimes lead to emotional reactions, creating a challenging environment in which to manage the species. The preferred alternative acknowledges the importance, value, and need for an educational program to parallel wolf management activities. The objective is to provide scientifically based, factual information regarding the gray wolf and its management in Montana.

The public needs to be aware of agency activities and the status of the wolf population as well as individual packs – particularly as new packs become established. In addition, FWP will assist the public and visitors to Montana in learning how to live, work, and recreate in the presence of a recovered wolf population, as well as providing technical assistance in resolving conflicts. For example, FWP will develop information and outreach materials that explain how to: 1) distinguish gray wolves from coyotes and other species; 2) report wolf sign or activity; 3) respond during human-wolf encounters; 4) contact FWP and other officials to resolve conflicts; 5) make sense of state laws and administrative rules that govern actions by state and federal agencies as well as private citizens and that explain the penalties for illegal activities.

FWP will acquire and develop information and will take a leadership role in formulating and disseminating educational materials. However, the information sources will be wide-ranging and include other state and federal agencies, Indian tribes, and non-governmental organizations with a variety of interests. All material provided to FWP and included in the program must be factual and have a foundation of scientific scrutiny. FWP envisions a collaborative approach.

Completion of the management plan and EIS is just the first step in a series of many in preparing to assume responsibility for wolf management in Montana. FWP will need to make considerable effort to inform and work with private citizens, stakeholder groups, trade organizations etc. to improve FWP's understanding of local concerns and to inform individuals about the management program and specific provisions.

**Human Safety.** FWP intends to reduce the potential for wolf-human conflicts and minimize the risks of human injury due to any large-sized canid. While the risk of an aggressive encounter with a wild wolf is low, FWP believes that the risk goes up in the absence of proper management. FWP will utilize extensive outreach to inform the public, aggressively discourage habituation of wild wolves, and respond to conflicts where and when they occur. See Table 26.

If a wolf (or similar large canid) loiters near ranch buildings or rural residences, FWP will evaluate the potential risk to human safety, taking into account the setting, behavior of the animal, and the sequence of events. Across the spectrum of wolf distribution and numbers, FWP will take an incremental approach. Potential actions include: increasing contacts within the local community and the media, closely monitoring the situation, radio collaring the animal to track its movements, aversive or disruptive conditioning, harassment, relocation, or lethal removal. A wolf could move through these areas, but length of stay and behavior will be important criteria for determining the appropriate management response. FWP will require some degree of flexibility to be most responsive to public safety concerns. Although the management responsibility related to wildlife and human safety rests with FWP, local law enforcement or other state or federal agency personnel may respond to a wolf-human incident if FWP personnel are not available in a timely manner. In the unlikely need to defend human life during a wolf

encounter, citizens may use any means, including lethal force, to address an imminent threat. Citizens must notify FWP afterward. This general approach, consistent with FWP guidelines for mountain lions and black bears, would be adopted as nuisance wolf guidelines.

FWP will provide educational materials to the general public with information about appropriate responses during wolf encounters (do's and don'ts) and how to minimize the potential for problems near homes and rural schools. This material will also include information about wolf behavior, body posture, tail position, vocalizations, etc. to help the public evaluate the situation, correctly interpret wolf behavior, and communicate the details accurately to agency personnel. An educational effort will also help the public understand the differences between wolves, mountain lions, and bears in terms of animal behaviors, potential risk of injury, appropriate human responses when threatened, and how to live and recreate safely in the presence of these large carnivores.

Montana statute (87-3-130, MCA) allows a person to kill a wolf if the wolf is “attacking, killing, or threatening to kill” a person or livestock when there is an immediate and direct threat. This statute also allows a person to kill a wolf if it is “attacking or killing a domestic dog.” Dog in this context refers to dogs kept as pets and hunting dogs. Dogs used for the purposes of herding or guarding livestock are discussed within the *Livestock/Compensation* section. See the clarification above.

**Monitoring.** FWP has the primary responsibility to monitor the wolf population, although collaborative efforts with other agencies and universities will be important. FWP will coordinate with adjacent jurisdictions to monitor boundary packs, whether tribes, NPS, other states, or provinces. This type of coordination already occurs for other wildlife species.

FWP will estimate wolf numbers and pack distribution, document reproduction, and tabulate mortality. FWP will also tabulate the number of breeding pairs meeting the federal recovery definition. Ecological understanding will also stem from documenting territory boundaries, the locations of wolf den and rendezvous sites, and identifying where significant wolf activity may be less desirable. While monitoring of the wolf population will help discern wolf population trends, wolf monitoring may also be conducted in the context of other wildlife management objectives related to prey species, such as identifying key wintering and spring wolf use areas and the prey species abundance and availability to wolves in those areas. The monitoring program will balance scientific precision with cost effectiveness. FWP will use a variety of tools, including radio telemetry and non-invasive techniques. Some social groups may be monitored more intensively than others, depending on the setting, landownership patterns, land uses, and prey species.

During the first five years post-delisting, FWP's monitoring program will have to be rigorous to demonstrate that adequate numbers of breeding pairs are present, that packs are reproducing, and that Montana's contribution to the tri-state recovery goal is met. In general, wolf populations can be monitored by counting wolves or packs, or by measuring wolf movements, reproduction or mortality. Federal wolf recovery in the northern Rockies is evaluated by counting breeding pairs, defined as an adult male and an adult female wolf raising at least two pups through December 31. USFWS has found enumerating wolves by age and sex in winter difficult at times and expensive because radio telemetry is required. If total wolf numbers or numbers of packs can substitute for more detailed criteria, it might allow significant savings in money, effort, and intrusiveness. For precise monitoring or populations in most habitats, radio telemetry is probably needed. If wolves are managed close to some threshold number, if dispersal needs to be documented, or if wolves are believed to be so inherently dangerous or vulnerable that monitoring needs to be precise, then radio telemetry is warranted. If the number of wolves is comfortably above a threshold number and less precision is acceptable, than less precise but repeatable methods like track surveys may be acceptable.

The monitoring criteria of a delisted wolf population are still under discussion by USFWS and the states of Montana, Idaho, and Wyoming. USFWS and the states will develop a post-delisting monitoring plan as part of the delisting package and identify the level at which wolves would be considered for relisting under ESA. USFWS has invited and funded the states to help provide input into developing any new post-delisting monitoring requirements that could provide accurate measures of a “wolf pack” that is as reliable and scientifically credible as the federal breeding pair recovery definition – without the significant expense of telemetry or determination of age/sex in winter. Preliminary data analysis indicates that surrogate definitions could be as scientifically reliable (Meier et al. in prep).

Table 26. Spectrum of management and public outreach activities to ensure public safety in Montana. The adaptive management model calls for selection of different management strategies as the number of breeding pairs (according to the federal recovery definition) changes from 10-15 to greater than 15. The model also calls for different strategies, depending on landownership patterns (Public Lands and Mixed Land Ownerships), social factors, land use patterns, biological constraints, and the physical attributes of the environment. Some management strategies may apply across all numbers of breeding pairs or management settings, as indicated by the arrows.

	10-15 Breeding Pairs* ←		→ Greater than 15 Breeding Pairs*	
	Public Lands <i>(backcountry areas &amp; near National Parks)</i>	Mixed Land Ownerships <i>(interspersed public and private lands; interspersed agriculture)</i>	Public Lands <i>(backcountry areas &amp; near National Parks)</i>	Mixed Land Ownerships <i>(interspersed public and private lands; interspersed agriculture)</i>
<b>Citizens</b>	Non –lethal harassment	→	→	→
	Lethal take in defense of life/property	→	→	→
<b>Agency Personnel</b>  <b>or</b> <b>Local Law Enforcement</b>	FWP Guidelines for Nuisance Wolves	→	→	→
	Non-lethal harassment	→	→	→
	Lethal removal if threat to public safety	→	→	→
<b>Montana Fish, Wildlife &amp; Parks</b>	Public outreach to inform & address specific needs	→	→	→
	Discourage wolf habituation	→	→	→

\* Montana shares a legal requirement with the states of Idaho and Wyoming to maintain a minimum total of 30 breeding pairs in the region. For the purposes of adaptive management, Montana will apply the federal breeding pair definition (a male and a female and at least two pups on December 31) since not all packs successfully breed and have pups every year. Montana would need to maintain 14-18 social groups (defined as four or more wolves traveling in winter) statewide to reliably maintain a minimum number of 10 breeding pairs with at least two pups on December 31.

FWP will monitor and tabulate packs according to the federal breeding pair definition to make decisions under the adaptive management framework. Concurrently, FWP would also tabulate packs according to a more general definition of a social group, meaning “four or more wolves traveling in winter.” USFWS data indicate that there is a significant correlation between the number of packs meeting the federal recovery definition as a breeding pair and the number of social groups according to the more general definition of four or more wolves traveling in winter (Meier et al. in prep). While there is no guarantee that a group of four or more wolves traveling in winter would include young of the year, it is indicative of a socially cohesive group holding a territory and capable of reproduction. Four or more wolves traveling together will likely contain a male and female as an alpha pair and that has or will produce young in the spring. Determining counts in winter would follow the peak of human-caused mortality on adult wolves associated with summer/fall livestock grazing seasons, potential illegal mortality during the fall big game hunting seasons, and the harvest expected through regulated hunting.

FWP will use the monitoring program to validate that the more general definition is adequate to document that the population is reproducing and secure and according to the post-delisting monitoring protocol cooperatively established. Once FWP and USFWS become confident that the more general definition is adequate, FWP will apply it within the adaptive management decision-making framework and FWP would not monitor packs using the more rigorous federal recovery definition. Maintaining the federal recovery definition as the monitoring metric under adaptive management over the long term may be too stringent for a recovered population, especially in light of the difficulty in distinguishing pups from similar-sized adults in December and the expense of radio telemetry.

***Other Wildlife.*** Under this alternative, the gray wolf would become integrated into FWP’s wildlife management program as the species integrates itself back into the natural environment. Other species of wildlife will benefit from the increased amount and availability of carrion while other species may compete for the same prey base, alter habitat use patterns to increase security, or even be killed by wolves. Overall, FWP’s program seeks to conserve and manage wildlife from an ecological point of view rather than focusing on single species. Recognition of ecosystem functioning is also important.

***Private Property.*** FWP recognizes that tolerance for wolves on private property is important to maintain the long-term security of a wolf population in Montana. Livestock damage in the context of private property is addressed above. Private property owners retain the right to grant or deny access to their property by FWP, WS or other entities. Private property owners also retain the right to choose whether any wolf management activities or control actions take place on their property.

***Hybrids.*** FWP would respond similar to USFWS response in Alternative 1 (No Action). Montana law assigns regulatory oversight of wolf-dog hybrid or captive wolf ownership to FWP. State law prohibits removing wolf pups from the wild. At the present time, state laws are thought to be adequate. Public outreach efforts will include identification techniques to discern a hybrid or captive wolf from a wild wolf. FWP biologists or game wardens will assist local authorities in making that determination and provide the appropriate management support to local authorities if necessary.

***Wildlife Management Areas.*** Wolves will be able to occupy or hunt on WMAs, consistent with the philosophy that mountain lions and black bears inhabit these lands, too. While these lands were purchased with license revenue and are managed primarily for wintering ungulates, they also provide habitat for a variety of wildlife species and for public recreation opportunities.

WMAs frequently adjoin both public and private lands and may attract carnivores due to the concentration of deer and elk. Wolf occupancy may cause ungulates to alter habitat use patterns, which may provide some relief for chronically overgrazed areas. However, wolf occupancy may also redistribute wild ungulates to neighboring private lands, potentially generating other conflicts. FWP will

work collaboratively to address this situation and resolve any conflicts, but will generally not remove individual wolves or wolf packs that use WMA lands.

### **Alternative 3. Additional Wolf**

Under this alternative, FWP would adopt and implement the Montana Wolf Management Advisory Council's Wolf Conservation and Management Planning Document and the subsequent updates described in Alternative 2 (Updated Council), but with some modifications. Each issue is listed in the same chronological order as the other alternatives. If this alternative approaches the issue as the council had recommended, it will be stated and the reader is referred to Alternative 2 (Updated Council). If this alternative approaches the issue differently, the changes are described.

Upon federal delisting, provisions of SB163 take effect and wolves would automatically be reclassified under state law from "endangered" to a "species in need of management." This statutory classification confers full legal protection.

#### **Implementation of this Alternative**

Implementation of this alternative is contingent on securing adequate funding for all program elements. Implementation also requires FWP to develop and adopt final administrative rules and regulations under the "species in need of management" designation. The FWP Commission may then approve and adopt the administrative rules and regulations, including any special language pertaining to wolf management or how FWP would interpret relevant state laws. This alternative would form the basis of those administrative rules and regulations. Future FWP Commission action could reclassify the gray wolf as a big game animal or a furbearer when it becomes appropriate to do so. The FWP Commission would concurrently establish regulations pertaining to management and regulated harvest under the new species designation. The Montana Legislature would establish a wolf license for regulated public harvest, the license fee, penalties for illegal take, and the restitution value. MOUs must also be finalized with MDOL and WS. FWP may seek to develop MOU's or cooperative agreements with Indian tribes to coordinate management and clarify roles and responsibilities.

#### **How Does this Alternative Address the Major Issues?**

***Wolf Management, Numbers and Distribution.*** Under this alternative, FWP would recognize the gray wolf as a native species and its management would be integrated within the wildlife program, as described for Alternative 2 (Updated Council). However, the adaptive management framework described for Alternative 2 would be modified to increase from 15 to 20, the number of breeding pairs (by the federal recovery definition) required to transition from conservative to liberal management tools. All other aspects of Table 22 remain the same.

***Social Factors.*** This alternative uses Alternative 2 (Updated Council) as a baseline, yet presents a different management scenario in which greater numbers of breeding pairs would be required prior to implementing liberal management tools. The social factors underlying this alternative originate in public comments expressing general support for FWP to manage the gray wolf similar to other large carnivores, but to do so conservatively and with greater numbers of wolves on the landscape.

***Administration, Delisting.*** Same as Alternative 2 (Updated Council), with one exception. Under this alternative, FWP would organize an annual workshop and interagency coordination meeting instead of working with a "standing" advisory council. The emphasis would be on citizen input and participation in the spirit of problem solving and on agency accountability back to the public. Participation by diverse

interests would be encouraged. Montanans and agency personnel would have the opportunity to identify and discuss issues as well as brainstorm solutions in an informal, non-confrontational atmosphere. Technical experts and decision makers would be present to listen, answer questions, provide information, as well as to formulate strategies for addressing the issues raised. Because other agencies have authority and jurisdiction to address the issues identified by the public, such as the federal land management agencies, their participation is strongly encouraged. The overall emphasis would be program evaluation, refinement of policy, and on the initial stages of establishing new policy or management direction in response to unforeseen developments. Potential outcomes of these coordination meetings include potential changes in FWP management strategies that could involve the FWP Commission or the Montana Legislature at a later time. Other outcomes may be enhanced understanding, improved communication, and continued involvement by all Montanans, not just a representative council.

The FWP Commission fulfills some of the same functions as an advisory council in that it is comprised of citizens, discusses issues and sets policy direction. FWP Commissioners would be encouraged to attend the workshop and interagency meetings.

***Prey Populations.*** Same as Alternative 2 (Updated Council). See Table 23.

***Funding.*** Same as Alternative 2 (Updated Council), with one exception. Under this alternative, the State of Montana would not find or create an entity to administer an independent compensation program (see below) and that line item would not be reflected in the budget. The estimated FWP budget for this Alternative is \$897,000. Compared to Alternative 2, this alternative increases the budgeted amount for enhanced ungulate monitoring (from \$75,000 to \$100,000). A detailed budget is presented in Chapter 4.

***Livestock / Compensation.*** Under this alternative, FWP would address wolf-livestock conflicts as recommended by the council in Alternative 2, using the same management framework and tools. Landowners would still be able to contact a management specialist (FWP or WS) for help with assessing risk from wolves and identifying ways to minimize those risks—while still acknowledging that the risk of livestock depredation by wolves will never be zero. In addition, FWP would work to develop programs that provide livestock operations with additional benefits if they implement preventive approaches and maintain opportunities for wildlife, including gray wolves, on private lands and associated public grazing allotments. It may also involve state and federal land management agencies.

Under this alternative, improved management and enhanced flexibility for the agency and the landowner would be substituted for a compensation program. Compensation for livestock injury or loss due to wolves was instituted by a private organization since the federal government and the State of Montana do not financially reimburse individuals for losses because of damage caused by wildlife. The Defenders of Wildlife Wolf Compensation Trust Fund has paid a total of \$81,140 for wolf-related claims in Montana since 1987 (data obtained 9-3-2002 from [www.defenders.org/wolfcomp.html](http://www.defenders.org/wolfcomp.html)). But under this alternative, the State of Montana would not actively promote, create, or facilitate an independent compensation provider to fund and administer a compensation program should the existing private program be discontinued. At the present time, no compensation programs are facilitated, created, or administered by FWP for large carnivores or other wildlife species in Montana. Historically, management response and technical assistance, whether carried out by agency personnel or by landowners, have been the traditional and legal basis for addressing wildlife-livestock conflicts in Montana.

Many public scoping comments identified concerns about a compensation program, and these are briefly summarized as follows. Compensation relies on verification, and this is not easily accomplished in Montana's multi-predator, mountainous environment. It also requires assessment of value, which can vary considerably--not every animal has the same value. For example, purebred lines of sheep and cattle are valued more highly than the simple market price of a cow or sheep at auction. Specific individuals in

those genetic lines may be of even greater value. Compensation programs also require perpetual fund-raising, with uncertain results and future availability. Complications further arise from the logistics of how losses are documented and which types of livestock are covered. Even after compensation is paid, some type of field response may still be necessary because of the potential for subsequent incidents. Compensation programs typically do not take into account the changes that livestock producers make in management operations or the economic costs associated with making those changes. Fundamentally, compensation addresses a problem only after it has occurred by reimbursing livestock owners for the financial losses incurred when livestock are injured or killed.

Instead of a compensation program, this alternative would provide landowners with management flexibility within the guidelines of Montana law and the administrative rules that will be adopted by the FWP Commission. Montana law makes it illegal to indiscriminately kill a wolf unless the wolf is “attacking, killing, or threatening to kill a person or livestock.” The prohibition against indiscriminant killing is similar to other legally classified wildlife such as big game (e.g. deer, black bear, mountain lion) or furbearers (e.g. martin, otter, or beaver). Montana law would require individuals to report incidents of wolf take to FWP within 72 hours. FWP would investigate to determine all of the facts or circumstances. The actual management tools proposed for landowner use in this alternative were described under Alternative 2 (Updated Council). Additional management tools (e.g. use of rubber bullets to haze wolves that frequent livestock concentration areas) and innovative approaches will arise on a case-by-case basis since each situation is unique.

***Wolf Habitat, Connectivity, and Land Management.*** Same as Alternative 2 (Updated Council).

***Economics / Livelihoods.*** Same as Alternative 2 (Updated Council).

***Information / Public Outreach.*** Same as Alternative 2 (Updated Council). See Table 22.

***Human Safety.*** Same as Alternative 2 (Updated Council). See Table 26.

***Monitoring.*** Same as Alternative 2 (Updated Council). See Table 22. However, under this alternative, the overall wolf monitoring intensity may decrease because a higher number of social groups will be present in Montana so a high degree of precision is less warranted. Some groups could be still monitored closely (e.g. groups which use private lands) while others may be monitored less intensively.

***Other Wildlife.*** Same as Alternative 2 (Updated Council).

***Private Property.*** Same as Alternative 2 (Updated Council).

***Hybrids.*** Same as Alternative 2 (Updated Council).

***Wildlife Management Areas.*** Same as Alternative 2 (Updated Council).

## Alternative 4. Minimum Wolf

Under this alternative, FWP would develop and adopt a wolf conservation and management program that meets the minimum standards for a secure, viable wolf population. It maintains the fewest wolves possible to fulfill the legal requirement of wolf recovery. It represents the most aggressive management philosophy and the lowest tolerance for wolf presence. Most of the underlying philosophies and guiding principles endorsed by the Council are stripped away, although many of the same management tools remain. This alternative most closely matches the “no wolf” sentiment expressed in some public

comments, but a strictly “no wolf” alternative was not considered for further development because it is outside the sideboards of federal wolf recovery.

Upon federal delisting, provisions of SB163 take effect and wolves would automatically be reclassified under state law from “endangered” to a “species in need of management.” This statutory classification confers full legal protection.

### **Implementation of this Alternative**

Implementation of this alternative is contingent on securing adequate funding for all program elements. Implementation also requires FWP to develop and adopt final administrative rules and regulations under the “species in need of management” designation. The FWP Commission must then approve and adopt the administrative rules and regulations, including any special language pertaining to wolf management or how FWP would interpret relevant state laws. This alternative would form the basis of those administrative rules and regulations. Future FWP Commission action could reclassify the gray wolf as a big game animal or a furbearer when it becomes appropriate to do so. The FWP Commission would concurrently establish regulations pertaining to management and regulated harvest under the new species designation. The Montana Legislature would establish a wolf license for regulated public harvest, the license fee, penalties for illegal take, and the restitution value. MOUs must also be finalized with MDOL and WS.

### **How Does this Alternative Address the Major Issues?**

***Wolf Management, Numbers and Distribution.*** This alternative grows out of the public comments suggesting that gray wolves don’t belong in Montana and that their presence through recolonization and reintroduction is entirely incompatible with the modern landscape. In the eyes of one citizen, “Montanans were forced to accept these wolves.” The underlying philosophy of this alternative is one of minimal tolerance for wolf presence on both public and private lands. Because Montana is “forced” to sustain some wolves and that conflicts will occur and may be unresolvable, the approach will isolate wolves from the rest of the FWP’s wildlife management program.

Modern scientific wildlife management principles have limited application under this alternative. The gray wolf would not be treated as a native wildlife species and it would be managed differently from mountain lions and black bears. Wolves would be managed as closely as possible to a legally classified predator such as the coyote, while still meeting the definition of “species in need of management” which provides a legal protection not extended to the coyote. Adaptive principles would not apply. Management tools would be aggressive and liberal most of the time in contrast to the incremental approach of Alternative 2 (Updated Council) and Alternative 3 (Additional Wolf).

Wolf numbers would be capped at 10 breeding pair (federal recovery definition), which is Montana’s expected minimum contribution towards the tri-state total of 30 pairs. More than 10 social groups will be required to achieve 10 breeding pairs as defined by the recovery definition because not every group successfully reproduces. FWP would tabulate the number of breeding pairs according to the federal recovery definition -- a male and a female with at least two pups on December 31. Total numbers will be fine-tuned to maintain only as many breeding pairs and social groups as necessary. Wolf distribution would be artificially zoned so that wolves would be strongly discouraged in eastern Montana and may in fact be routinely trapped and relocated to western Montana or removed from the population if suitable release sites could not be found. Wolves would be permitted in FWP administrative Regions 1, 2, and 3, and portions of Regions 4 and 5. The eastern boundary line would correspond to boundaries for FWP



Table 27. Wolf management strategies to maintain the minimum number of breeding pairs required in Montana under Alternative 4 (Minimum Wolf).

	<b>Wolf Management Strategies to Maintain the Minimum Required</b>
<b>Montana Fish, Wildlife &amp; Parks</b>	<p>Minimum number of breeding pairs and social groups required; distribution limited to western Montana and mostly on public lands</p> <p>Management liberal most of the time; management not adaptive; independent from rest of wildlife programs</p> <p>Minimum health and disease surveillance</p> <p>Intense monitoring required, with heavy reliance on radio telemetry</p> <p>Limited or no research to improve ecological understanding or evaluate management actions</p> <p>Law enforcement a low priority beyond administration of special kill permit programs and retrieval of wolf carcasses legally killed under special permits</p> <p>Public outreach emphasizes landowner contacts to inform them of wolf activity in an area; outreach also to addresses human safety concerns</p> <p>Significant interagency and interstate coordination required</p> <p>Ensure human safety; discourage wolf habitation</p> <p>Limited and potentially inconsistent opportunity for public hunting and trapping since many wolves would be killed through other management/control activities</p> <p>Liberal number of special kill permits available to landowners</p> <p>Management for boundary packs overlapping national parks, tribal reservations, Canada, Idaho, or Wyoming more conservative than for other packs since national parks would be an important contribution towards Montana's total number</p> <p>No Advisory Council or annual citizen invitation to interagency coordination meetings</p>
<b>Wildlife Services</b>	<p>When the wolf population is above the minimum, aggressive management and control to prevent establishment of new packs, especially on private property and in eastern Montana, and where there is a potential for wolf-livestock conflicts</p> <p>Technical assistance to landowners</p> <p>Field investigations and management response; lethal control first on private lands but response could be more incremental on public lands when wolf population close to the minimum standard and for packs near national parks</p>
<b>Citizens</b>	<p>Non-lethal harassment on private lands</p> <p>Lethal take in defense of human life or livestock on public or private lands if wolf "attacking, killing or threatening to kill" a person or livestock; may take a wolf if it is "attacking or killing" a domestic dog</p> <p>May receive special kill permit to remove wolves on private land; public land if there is a history of wolf-livestock conflicts; landowner could use designated trapper; number of permits liberal</p>

Regions 6 and 7. Wolf presence in portions of Regions 4 and 5 would be tolerated, depending on whether wolves occurred in large blocks of public land or in mixed ownerships where conflicts were likely. Wolf use of private lands would be at the discretion of the landowner, one step shy of prohibiting wolves on private lands since some landowners may tolerate wolf use. Capping wolf numbers and administratively defining (or zoning) wolf distribution requires aggressive management tools and a liberal interpretation of management flexibility for both agencies and landowners. Other aspects of how wolves would be managed under this alternative are listed in Table 27.

***Social Factors.*** This alternative represents the most liberal, exploitive management approach of the five alternatives. The social factors underlying it originate in public comments expressing dissatisfaction with why or how wolves got to Montana and opinions that wolf presence can't be accommodated in these modern times for a variety of reasons, including unacceptable impacts to livestock producers and big game populations. Rather than "getting" to manage wolves, FWP "has to" and it is a "cost." This alternative most closely addresses public comments calling for the removal of all wolves from Montana.

***Administration, Delisting.*** Same as Alternative 2 (Updated Council). However, individual landowners would carry relatively more responsibility for management activities on private lands in lieu of agency response compared to Alternatives 2 (Updated Council) and 3 (Additional Wolf). FWP will provide as many special kill permits as possible to interested landowners for wolf control actions on their private property. WS will still respond to wolf-livestock complaints, provide technical assistance to landowners, and aid in restricting wolf distribution to western Montana.

***Prey Populations.*** Under this alternative, wolf predation on big game populations would be minimized out of the concern that wolf predation may compete with human hunter harvest at a 1:1 ratio and is an additive form of mortality for prey populations under most circumstances. This would be accomplished by the overall aggressive management activities of this alternative, such as capping total numbers, the liberal provisions for landowners to kill wolves on private lands, limiting overall distribution, and restricting wolf use of FWP WMAs. Prey populations would be monitored less intensively than Alternatives 2 (Updated Council) and 3 (Additional Wolf) because fewer wolves would be present.

***Funding.*** Under this alternative, the wolf program would be funded entirely by special federal appropriations, since the role of licensed hunters and trappers is expected to be minimal and the gray wolf would not be integrated into the broader context of a scientific wildlife management program. This alternative is the most expensive alternative to implement.

The estimated FWP budget for this alternative is \$952,000. It requires increased FWP personnel and operations money to do the necessary wolf monitoring because the population would be managed so closely to the minimum required. Because each individual wolf becomes more "valuable" to the overall population, a high degree of precision is necessary to ensure that management decisions do not jeopardize the population and trigger a relisting. Additional personnel and operations money would be required for administration of the special kill permit program through the FWP Enforcement Division since wolf management on private lands is expected to be so aggressive. Additional funding would also be needed to inform private landowners when wolves are in the area and for other coordination among agencies and private landowners. Because of the high degree and frequency of coordination required between FWP regions, between Montana and the other states, and likely with USFWS, administrative costs are expected to increase. The budgeted amount for WS would decrease because there would be fewer wolves in Montana, and landowners could be responsible for most conflict resolution on private lands. The budget would not include compensation (see below).

***Livestock / Compensation.*** Under this alternative, there is little tolerance for wolves on private property. FWP would be as liberal as possible in the number of special kill permits issued to livestock producers

and other private property owners in the vicinity, while maintaining the minimum number of wolves required (Table 28). Livestock producers could still kill wolves caught “attacking, killing, or threatening to kill” their livestock and the FWP Enforcement Division would still investigate defense of property incidents. Because of the underlying premise of liberal, aggressive wolf management to limit wolf numbers and distribution, with landowner participation, livestock losses would be minimized to the extent possible. Therefore, a compensation program is not included under this alternative.

***Wolf Habitat, Connectivity, and Land Management.*** Under this alternative, Montana’s connectivity requirement would be met through a trapping/relocation program to artificially simulate the natural dispersal events required to ensure long-term genetic viability. Survival of relocated wolves has not been empirically determined for Montana wolves. Therefore, a strong reliance on the core habitats provided by national parks would be necessary because these packs could more reliably provide dispersing individuals. In addition, these packs would be managed more conservatively than other packs. No specific habitat corridors, travel restrictions, or area closures are incorporated in this alternative.

***Economics / Livelihoods.*** This alternative favors the economic interests of livestock producers and the interests of big game hunters because aggressive management would limit wolf numbers and distribution—and presumably the impact of wolves on livestock and ungulate populations. However, some landowners may incur some expenses in carrying out wolf management activities on their private properties. YNP would still be a prime wolf-viewing destination. But, outside YNP, ecotourism and wildlife-viewing interests would not be given much consideration under this alternative.

***Information / Public Outreach.*** The alternative expands the outreach efforts in Alternatives 2 (Updated Council) and 3 (Additional Wolf) to include significantly greater FWP communication and coordination with individual landowners due to the high number of special kill permits available. Under this alternative more so than any other, FWP would also notify landowners when wolves are known to be in the area. Frequent notification is added to this alternative in response to public comment gathered during scoping.

***Human Safety.*** Same as Alternative 2 (Updated Council).

***Monitoring.*** Under this alternative, the monitoring program is much more intensive than the other alternatives. This is because FWP will be managing the wolf population very close to the minimum requirements to keep the northern Rockies population from being relisted. Pack status must be known with a high degree of certainty. The monitoring program will rely heavily on radio telemetry so that packs could be found readily to notify landowners when wolves are in the area and so that pack status is monitored on an ongoing basis. FWP would do whatever was necessary to keep at least one radio collar in as many social groups of wolves as required in order to document 10 breeding pairs meeting the federal recovery definition. A significant commitment of FWP resources and field personnel to trap and monitor packs would be required in order to achieve the necessary precision when the wolf population so close to the minimum standard.

***Other Wildlife.*** Benefits of wolf presence to other wildlife (like scavengers) are minimized due to minimal wolf numbers and limited distribution. Conversely, other wildlife species, such as beaver, which are prey for wolves, may benefit from the wolf low numbers. Under this alternative, the gray wolf is not integrated into FWP’s wildlife management program, but other species will continue to be managed in the presence of a limited wolf population.

***Private Property.*** The alternative is more deferential to private property owners’ decisions about wolf use of their lands. Since wolves would not be treated like other publicly owned wildlife, landowners would

be granted greater latitude to resolve conflicts so long as the overall wolf population in Montana remained above the minimum required. See *Livestock* issue above.

**Hybrids.** Same as Alternative 2 (Updated Council.) See Table 22.

**Wildlife Management Areas.** As noted above, wolf distribution under this alternative is administratively determined and artificially maintained through management and control. Wolves would be discouraged from using FWP WMAs. FWP field personnel could haze and trap/relocate wolves discovered on WMAs. Individual wolves will be allowed to cross FWP properties, but ideally, would not be allowed to stay long enough to hunt deer or elk.

Table 28. Potential management activities that address wolf-livestock conflicts under Alternative 4 (Minimum Wolf). Management actions and the number of special kill permits become more liberal with increasing numbers of breeding pairs above the recovery goal.

	Wolf Management to Maintain the Minimum Required	
	Defense of Life/Property	Livestock Protection
<b>Landowners and Livestock Producers</b>  (or their agents)	Could harass, injure or kill a wolf in defense of human life or livestock without permit on public or private lands if the wolf is “attacking, killing, or threatening to kill” a person or livestock  Could harass, injure, or kill a wolf in defense of a domestic dog if the wolf is “attacking or killing” the domestic dog	May receive special kill permit from FWP for private land or public land if wolf-livestock conflicts; maximum number available to keep number of breeding pairs at the minimum  May non-lethally harass wolf  May hire designated trapper to fill special kill permit
<b>Citizens</b>  (outfitters, hunters, recreationists)	Could harass, injure or kill a wolf in defense of human life or livestock without a permit on public or private lands if the wolf is “attacking, killing, or threatening to kill” a person or livestock;  Could harass, injure, or kill a wolf in defense of a domestic dog if the wolf is “attacking or killing” the dog	May non-lethally harass
<b>Wildlife Services</b>		Provides technical assistance to landowner and investigates complaints  Management actions to harass, relocate, or kill wolf if on public land; lethal control on private land
<b>Montana Fish, Wildlife &amp; Parks</b>	Provide technical assistance  Relocate, harass, or kill wolf	Provide technical assistance  Administers special kill permit program  Tabulate mortality

### **Alternative 5. Contingency**

Under this alternative, FWP would seek to enter into a cooperative agreement with USFWS to implement the Updated Council Alternative (2) while the gray wolf is still listed as an interim step to assuming full management authority in the event that delisting is postponed. Delisting delays could be caused by the lack of conservation plans and/or adequate regulatory mechanisms in the other two states or by litigation on the actual USFWS delisting proposal. The public anticipated delays and expressed their concerns about developments beyond Montana's control during the scoping process. In response, FWP developed this unusual alternative.

This alternative allows FWP to respond to citizens' needs and address the challenges faced by those most directly affected by wolf presence, albeit more conservatively than FWP or the public may desire, until such time as the wolf is delisted and under full authority of the state. It may not be legally possible to implement some provisions, such as regulated public harvest, because of the listed status but many other aspects would be.

FWP believes inclusion of this alternative is important because gray wolves will continue to increase their numbers and distribution in Montana while the administrative process for delisting runs its course. Gathering public comment on it now as part of the EIS process allows FWP to hear from Montanans about the future of wolf management under a different set of legal conditions should wolves not get delisted in the near future. The significance or duration of any delay is speculative at this time. Nonetheless, this alternative outlines a potential approach that would allow FWP to become more involved in the day to day management of wolves in Montana than is presently the case.

Even if FWP selected this alternative as an interim management program while the delisting process is ongoing, FWP would continue working with USFWS and the states of Idaho and Wyoming to resolve any obstacles to complete delisting and the transfer of management authority from the federal government to the respective state governments. Upon delisting, FWP would implement the remaining program elements of Alternative 2 (Updated Council) that had previously been prohibited by federal regulations.

#### **Implementation of this Alternative**

Section 6 of ESA provides an opportunity for cooperative agreements between USFWS and the states for the conservation of endangered or threatened species. Implementation of this alternative would involve FWP modifying the existing Section 6 agreement with USFWS to include wolf conservation and management. USFWS may have to fulfill other administrative responsibilities prior to implementing this alternative. FWP would implement the Updated Council Alternative (2) to the extent allowable by federal law (and existing rules) while the species is still listed. The State of Montana would be the primary decision maker. USFWS would maintain some oversight authority to assure that FWP does not violate the agreement, violate ESA or federal rules, or stray outside the provisions outlined in this alternative. USFWS would annually review the state's program. WS would still investigate and resolve wolf-livestock conflicts as described in Alternative 2 (Updated Council). Implementation of this alternative is contingent on securing adequate funding from federal and private sources for all program elements.

FWP and USFWS would renew the agreement, even modify it when and where necessary, until all three states have acceptable management plans and adequate regulatory mechanisms, USFWS has completed its delisting process, and any litigation delaying the transfer of management authority is resolved.

Upon delisting, FWP would take the administrative steps necessary, including MEPA compliance if a supplement to this EIS is required, to adopt and implement the remaining provisions of the Updated

Council Alternative (2) that had been prohibited by federal law. State laws and regulations would then fully guide the program, including SB163 provisions that reclassify the gray wolf from “endangered” to a “species in need of management.” This classification confers full legal protection.

The Draft EIS stated that there was an important caveat to this alternative that would affect FWP’s decision whether to implement it. In 2000, USFWS proposed to reclassify gray wolves in the northern Rockies as “threatened” and to implement new rules commensurate with that downlisting. After the release of FWP’s Draft EIS, USFWS reclassified wolves in the Northwestern Montana Recovery Areas as “threatened” (USFWS 2003a). The newly-adopted rules provide for greater agency flexibility in resolving conflicts. Because of the increased flexibility for agencies and private citizens under these new rules, FWP considers this alternative viable so long as adequate funding becomes available to implement it.

### **How Does this Alternative Address the Major Issues?**

***Wolf Management, Numbers and Distribution.*** FWP would implement all the conservation and management elements outlined in the Updated Council Alternative (2) that are consistent with and allowed by federal law and regulations (see Table 22). Nearly all aspects would be allowed in some form or another, but the circumstances by which gray wolves could be injured or killed is an important exception because wolves would still be listed under ESA. Regulated harvest of wolves through hunting and trapping is not possible under this alternative. Furthermore, special kill permits issued by FWP to address wolf-livestock conflicts would be subject to the same provisions as the federally issued permits. These permits are discussed in greater detail in the *Livestock / Compensation* section below.

***Social Factors.*** The social factors underlying a balanced, responsive program, as described in Alternative 2 (Updated Council), are also reflected in this alternative. Additionally, the alternative responds to Montanans’ concerns that they could be negatively affected by increases in wolf numbers and distribution and a lack of management authority by Montana if the wolf was not delisted in a timely manner. Many citizens commented that it seemed unfair for Montanans to be negatively affected by delays beyond their control and that, in the absence of a more proactive program, conflicts would become increasingly severe and difficult to resolve.

***Administration, Delisting.*** Under this alternative, the gray wolf would still be federally listed and classified as “experimental, non-essential” in the Yellowstone and Idaho recovery areas. In the Northwestern Montana Recovery Area, the gray wolf is now classified as “threatened.” USFWS adopted new rules that enhance management flexibility for agencies and private landowners to resolve conflicts on private land and offers agencies additional help to address wolf-livestock conflicts on public lands (see USFWS 2003a). Federal rules and regulations would apply as they were published in the final rules (USFWS 2003a), either in the experimental areas or the Northwestern Montana Recovery Area. There are few differences between the federal rules applicable to each area, but any differences could be addressed in the FWP/USFWS agreement so that management would be more consistent across Montana.

***Prey Populations.*** Same as Alternative 2 (Updated Council), with one exception. FWP would still integrate the wolf management with ungulate management as described for Alternative 2. However, FWP’s wolf management tools would be limited to relocation if reliable data indicate that a local prey population is significantly impacted by wolf predation in conjunction with other environmental factors. Regulated harvest could not be used to reduce pack size while wolves are still listed under ESA.

Montana’s final plan will need to describe what the adverse impacts are, how they will be measured, and identify possible mitigation measures. Before FWP initiates capture and relocation efforts, USFWS would need to approve the state’s final plan and determine that such actions will not inhibit wolf

population growth toward recovery. USFWS may itself, in cooperation with FWP, capture and relocate wolves. FWP's prey monitoring efforts are an important aspect to assessing wolf predation effects on ungulate populations. Hunter opportunity for ungulates will still fluctuate according to ungulate population status – as it is influenced by weather, predation, previous hunter success, etc.

**Funding.** Funding to implement this alternative would be split between Montana and the federal government because the species would still be listed and Montana lacks a significant source of funding dedicated to ESA-listed species. Section 6 of ESA provides for 90% of the funding, but Montana would need to fund the remaining 10%. This 90-10 cost share is also predicated on the condition that Montana continues to coordinate with the other states to recover and delist the gray wolf, which most certainly will be the case. FWP would fund its share either through private sources or by state license revenue. Although regulated harvest of wolves is not allowed, this alternative would allow wolves to be relocated if a localized ungulate population were significantly impacted. In anticipation of delisting, FWP would still be trying to secure funding for the day when Montana assumes full management authority.

The estimated FWP budget for this alternative is \$924,739 – \$1,062,399 . The costs of a compensation program are included in that amount even though it would be funded from separate sources. Compared to Alternative 2 (Updated Council), this alternative requires that WS continue to obtain the funding for resolution of wolf-livestock conflicts from federal sources through a combination of Congressional appropriations and USFWS, as is currently the case. FWP would still direct \$50,000 towards increased efforts to minimize the risk of wolf-livestock conflicts and proactive management strategies.

According to this alternative, the State of Montana intends to find or create an entity to administer a compensation program. This is reflected in the detailed budget presented in Chapter 4, but the funds would not be sourced from FWP funds, matching federal funds, or other state revenue.

**Livestock / Compensation.** Same as Alternative 2 (Updated Council), except that actions by livestock producers, WS, and FWP that would harass, injure, or kill wolves in conflict with livestock are guided by federal law and regulations. The federal regulations are similar to Alternative 2 (Updated Council) in that they are intended to promote flexibility for landowners and agencies to resolve conflicts by directing management response at problem wolves. The specific management tool most readily available to livestock producers to resolve conflicts is a permit that authorizes someone to take a wolf under certain conditions. These are similar to the state's special kill permit described under Alternative 2 (Updated Council). However, the federal regulations are more restrictive, in keeping with the ESA-listed status. The conditions are described in Table 29 and in USFWS (2003). It is important to note that while the adaptive management framework still guides the incremental approach, taking of wolves under the federal regulations is guided by whether the conflict took place on public or private land, not whether it took place on remote public lands or mixed land ownerships, as is the case in Alternative 2 (Updated Council).

This alternative would maintain and enhance the benefits of a compensation program, as described for Alternative 2 (Updated Council). See Table 25.

**Wolf Habitat, Connectivity, and Land Management.** Same as Alternative 2 (Updated Council).

**Economics / Livelihoods.** Same as Alternative 2 (Updated Council).

**Information / Public Outreach.** Same as Alternative 2 (Updated Council).

**Human Safety.** Same as Alternative 2 (Updated Council). FWP clarifies that current federal regulations do allow a person to take a wolf in defense of their life or that of another. The wolf must pose an immediate and direct threat. The incident would need to be reported to FWP within 24 hours according to

federal regulations, rather than 72 hours under state law. Reasonable accommodation may be allowed for incidents taking place in remote backcountry settings. Federal regulations would also allow FWP to remove a wolf that the agency determines to be a demonstrable, but not immediate threat to human life or safety. The federal regulations are similar to what is described in Table 26.

**Monitoring.** FWP would take the lead in wolf monitoring, but periodic consultation or assistance from USFWS is expected. FWP would monitor the population as described in Alternative 2 (Updated Council).

**Other Wildlife.** Same as Alternative 2 (Updated Council).

**Private Property.** Same as Alternative 2 (Updated Council). Federal laws guide response to wolf conflicts on private property. No government restrictions on private property uses.

**Hybrids.** Same as Alternative 2 (Updated Council).

**Wildlife Management Areas.** Same as Alternative 2 (Updated Council).

Table 29. The spectrum of potential management activities to minimize the potential for wolf-livestock conflicts and the management tools available to resolve conflicts where and when they develop. The State of Montana intends to find or create an entity to administer a compensation program. The adaptive management model calls for a more conservative approach for public lands and when there are 10-15 breeding pairs (according to the federal recovery definition of an adult male and female with two pups on Dec. 31). More liberal tools become available if there are greater than 15 breeding pairs in Montana. Some management strategies may apply across all numbers of breeding pairs or landownership, as indicated by the arrows.

	10-15 Breeding Pairs* ←		→ Greater than 15 Breeding Pairs*	
	Public Lands	Private Lands	Public Lands	Private Lands
<b>Livestock Producers</b>	Non-injurious, opportunistic harassment ok; report in 7 days	→	→	→
	Intentional injurious harassment by permit only if wolf activity in vicinity of livestock persistent	→	→	→
	WS response; technical assistance from WS & FWP	→	→	→



Table 29. Continued.

	10-15 Breeding Pairs* ←		→ Greater than 15 Breeding Pairs*	
	Public Lands	Private Lands	Public Lands	Private Lands
<b>Livestock Producers</b> (continued)	<p>Lethal take in defense of livestock or herding animals requires a permit;</p> <p>Kill permits available after livestock confirmed wounded or killed and agency efforts to resolve the problem were completed, but ineffective; physical evidence must be confirmed; report within 24 hours</p> <p>Conservative number issued</p>	<p>Injure or kill wolf in the act of biting, wounding, or killing livestock or dogs; physical evidence must be confirmed; no permit required; report within 24 hours</p> <p>Kill permits available if there at least 2 confirmed depredation incidents on the property or adjacent property (could be separated by a reasonable amount of time) and wolves routinely present and pose a risk to livestock or dogs; report take within 24 hours</p> <p>Conservative number issued</p>	<p>Lethal take in defense of livestock or herding animals requires a permit</p> <p>Kill permits available after livestock confirmed wounded or killed and agency efforts to resolve the problem were completed, but ineffective; physical evidence must be confirmed; report within 24 hours</p> <p>Number issued more liberal</p>	<p>Injure or kill wolf in the act of biting, wounding, or killing livestock or dogs; physical evidence must be confirmed; no permit required; report within 24 hours</p> <p>Kill permits available if there at least 2 confirmed depredation incidents on the property or adjacent property (could be separated by a reasonable amount of time) and wolves routinely present and pose a risk to livestock or dogs; report take within 24 hours</p> <p>Number issued more liberal</p>
<b>Citizens</b> (outfitters, hunters, recreationists)	Same as livestock producers	→	→	→
<b>Wildlife Services</b>	<p>Technical assistance to producers, cooperation with FWP</p> <p>Activity directed by MOU with FWP and Montana Department of Livestock</p> <p>Incremental approach, conservative</p>	<p>→</p> <p>→</p> <p>→</p>	<p>→</p> <p>→</p> <p>Incremental approach</p>	<p>→</p> <p>→</p> <p>Incremental approach, liberal</p>

Table 29. Continued.

	10-15 Breeding Pairs* ←		→ Greater than 15 Breeding Pairs*	
	Public Lands	Private Lands	Public Lands	Private Lands
<b>Montana Fish, Wildlife &amp; Parks</b>	Technical assistance to producers, cooperation with WS	→	→	→
	Special permit administration and oversight; carcass retrieval	→	→	→
	Responsible for disposition of wolves involved in conflicts	→	→	→
	Public outreach to inform and address specific needs	→	→	→
<b>Compensation</b>	State of Montana intends to find or create an independent entity to administer a compensation program; details developed pending final results of Compensation Research Study; Non-governmental organization administers	→	→	→
	Private donations and or special state or federal appropriations (no FWP, matching federal or general state funds)	→	→	→

\* Montana shares a legal requirement with the states of Idaho and Wyoming to maintain a minimum total of 30 breeding pairs in the region. For the purposes of adaptive management, Montana will apply the federal breeding pair definition (a male and a female and at least two pups on December 31) since not all packs successfully breed and have pups every year. Montana would need to maintain 14-18 social groups (defined as four or more wolves traveling in winter) statewide to reliably attain a minimum number of 10 breeding pairs with at least two pups on December 31.

Table 30. Summary of how each alternative addresses the issues identified by the Montana Wolf Management Advisory Council and by the general public in spring, 2002.

<b>Issues</b>	<b>Alternative 1 No Action</b>	<b>Alternative 2 Updated Council</b>	<b>Alternative 3 Additional Wolf</b>	<b>Alternative 4 Minimum Wolf</b>	<b>Alternative 5 Contingency</b>
<b>Wolf Management</b>  <b>Numbers</b>  <b>Distribution</b>	Existing program; emphasizes species recovery and resolution of conflicts with livestock and protection of human safety; pack definition is the same as a breeding pair -- "a male and a female with at least 2 pups on December 31"; little emphasis on proactive management of numbers and distribution outside context of conflict resolution	Adaptive; management like other large carnivores; trigger is 15 breeding pairs; no cap; no zone; regulated harvest possible in the future; packs managed according to provisions of the Planning Document and the 2003 updates when within Montana state boundaries and in with coordination the adjacent authority; Montana will count packs that den within the state border towards adaptive management tally; all boundary packs are counted toward tri-state recovery requirement, but shall not be counted by more than one state	Same as Alternative 2; adaptive management trigger increased to 20 breeding pairs according to the federal recovery definition	Not adaptive; cap at minimum number of breeding pairs and social groups above delisting level; zoned out of eastern Montana and off private property; packs defined according to the federal definition of breeding pair; boundary packs managed conservatively; more management and control carried out by landowners	Same as Alternative 2; no regulated harvest; federal rules and regulations guide harassment and take
<b>Social Factors</b>	Conservative management, as per ESA; protectionist	Moderate; balanced; integrated into wildlife program; program goal is "biologically possible, socially acceptable, and economically feasible"	Same as Alternative 2	Aggressive management; low tolerance; treated separately as a "cost"; not integrated into wildlife program; exploitative	Same as Alternative 2, but responds to public concerns over potential delisting delays by implementing the Alternative 2 as an interim step (to the extent allowed by federal law) prior to gaining full authority

Table 30. Continued.

<b>Issues</b>	<b>Alternative 1 No Action</b>	<b>Alternative 2 Updated Council</b>	<b>Alternative 3 Additional Wolf</b>	<b>Alternative 4 Minimum Wolf</b>	<b>Alternative 5 Contingency</b>
<b>Administration  Delisting</b>	USFWS, WS; listed under ESA; federal laws apply	FWP, FWP Commission, MDOL, WS; no longer listed as endangered/threatened under federal law or endangered under state law; state laws, administrative rules apply	Same as Alternative 2	Same as Alternative 2	Same as Alternative 2, but wolf still listed under state and federal law; some federal laws and regulations apply
<b>Prey Populations</b>	Wolf impacts to big game populations not addressed without an approved state plan; since no state plan would be prepared, no management could occur to address prey concerns; monitoring and research at current levels	wolf/prey management integrated, ecological; increase monitoring where wolf packs establish; research; increase/decrease hunter opportunity for predators and prey currently and as appropriate to meet goals	Same as Alternative 2	Aggressive wolf management to benefit prey; no enhanced ungulate monitoring	Same as Alternative 2 but wolf management tools limited to relocation
<b>Funding</b>	Federal	Combination of federal, state, private sources; federal share required for implementation	Same as Alternative 2	Federal	Federal 90%, state 10%; state's share is license revenue and private
<b>Livestock</b>	Existing rules/regulations (experimental area rules and pending reclassification proposal)	WS MOU with FWP; FWP special kill permits for landowners; defense of life/property if wolf is "attacking, killing, or threatening to kill"	Same as Alternative 2; greater emphasis and more resources dedicated to preventative measures and proactive approaches to minimize risk	WS liberal, landowner special kill permits liberal	Same as Alternative 2, federal law and regulations guide owner harassment and take of wolves with or without a permit, on public or private lands
<b>Wolf Habitat, Connectivity, Land Management</b>	Provided by legal protections, achieving adequate population numbers; public education	Same as Alternative 1; FWP technical participation and coordination with land management agencies and transportation planners	Same as Alternative 2	Same as Alternative 2; connectivity through periodic trap/relocation	Same as Alternative 2

Table 30. Continued.

<b>Issues</b>	<b>Alternative 1 No Action</b>	<b>Alternative 2 Updated Council</b>	<b>Alternative 3 Additional Wolf</b>	<b>Alternative 4 Minimum Wolf</b>	<b>Alternative 5 Contingency</b>
<b>Compensation</b>	Voluntarily provided by Defenders of Wildlife as long as wolf still listed under ESA	Yes; State of Montana intends to find or create an entity to administer a compensation program; no FWP funds (state or matching federal monies) and no Montana general fund monies; may still be voluntarily provided by Defenders of Wildlife or	No; State of Montana would not find or create an entity to administer a compensation program; may be available voluntarily by Defenders of Wildlife	No; wolf management aggressive by landowners, WS, and FWP to minimize livestock losses	Same as Alternative 2
<b>Economics, Livelihoods</b>	Avoid disrupting land management activities that may be harmful to local economies and livelihoods; resolve wolf-livestock conflicts; compensation for livestock losses made by independent entity; wolf recovery benefits other economic sectors and commercial activity	Economic costs and benefits of wolf restoration in Montana accrue to individuals or economic sectors differently; integrate and sustain a wolf population within the complex biological, social, and economic landscape; acknowledge the benefits to other economic sectors associated with recovered population; compensation for confirmed and probable livestock losses; provisions to minimize wolf effects on ungulate populations through integrated management	Same as Alternative 2, but FWP would more proactively address and minimize risk of economic losses for livestock producers and private landowners to the extent possible	Aggressive and liberal management to favor the economic interests of livestock producers and others who may be economically impacted by higher wolf numbers; does not capture full economic benefits associated with tourism	Same as Alternative 2, but federal regulations guide resolution of wolf-livestock conflicts
<b>Information, Education, Public Outreach</b>	Existing effort	Increased effort through Conservation Education Division; technical assistance to landowners	Same as Alternative 2	Limited effort by Conservation Education Division; high degree of interaction with landowners to notify when wolves in the area	Same as Alternative 2

Table 30. Continued.

<b>Issues</b>	<b>Alternative 1 No Action</b>	<b>Alternative 2 Updated Council</b>	<b>Alternative 3 Additional Wolf</b>	<b>Alternative 4 Minimum Wolf</b>	<b>Alternative 5 Contingency</b>
<b>Human Safety</b>	Lethal take to defend human life if immediate threat to person and by agencies to protect human safety; citizen must report incident in 24 hours	Discourage habituation; FWP removes habituated animals; lethal take to defend human life if imminent danger; citizen must report in 72 hours; FWP or agent may take wolf to protect human safety in proactive context	Same as Alternative 2	Same as Alternative 2	Same as Alternative 2, but reporting requirement is 24 hours according to federal regulations
<b>Monitoring</b>	Done by USFWS to document progress towards recovery goals	Yes; effort commensurate with other wildlife using standard protocols; balance cost effectiveness with precision; document breeding pairs for adaptive management framework; validate more general definition of at least four wolves traveling in winter	Same as Alternative 2	Yes; intense telemetry effort required	Same as Alternative 2
<b>Other Wildlife</b>	No special provisions; FWP responds to special needs where/when they develop; ecosystem processes; impacts to other listed species not significant	Taken into account by integrating wolf within wildlife program; ecological context so some species benefit but others may not; FWP responds to special needs where/when they develop	Same as Alternative 2	May benefit because of low wolf numbers; scavengers benefit less	Same as Alternative 2

Table 30. Continued.

<b>Issues</b>	<b>Alternative 1 No Action</b>	<b>Alternative 2 Updated Council</b>	<b>Alternative 3 Additional Wolf</b>	<b>Alternative 4 Minimum Wolf</b>	<b>Alternative 5 Contingency</b>
<b>Private Property</b>	Wolves may be present on private property similar to other publicly-owned wildlife; landowner response to wolf use guided by federal laws and regulations; no federally-imposed takings or restrictions on private property	Wolves may be present on private property similar to other publicly-owned wildlife; landowner response to wolf use guided by state laws and regulations; minimize potential for conflicts to the extent possible; resolve conflicts in a timely manner; owners able to grant or deny access to their property; no government-imposed restrictions	Same as Alternative 2	Wolves may be present, but there is greater deference to owners' preferences; landowners granted greater latitude to resolve conflicts and may discourage wolf use	Same as Alternative 2; federal laws and regulations guide response to wolf conflicts in context of livestock as private property; no government restrictions
<b>Hybrids</b>	Do not contribute to wild population; management removal possible; state laws for possession, marking, and, liability; local authorities respond	FWP/state response like USFWS response in Alternative 1	Same as Alternative 2	Same as Alternative 2	Same as Alternative 2
<b>Wildlife Management Areas</b>	Wolf use possible; limited input from FWP	Wolf use possible; FWP balances wolf and prey use; wolf-livestock conflicts resolved as per <i>Livestock / Compensation</i> section	Same as Alternative 2	Limited tolerance for wolf use, discouraged	Same as Alternative 2; federal laws and regulations guide response to conflicts with livestock